The
# SHIPPING WORLD
AND SHIPBUILDING & MARINE ENGINEERING NEWS

VOL. CXXIV No. 3006 WEDNESDAY, FEBRUARY 7, 1951 Price 1/6

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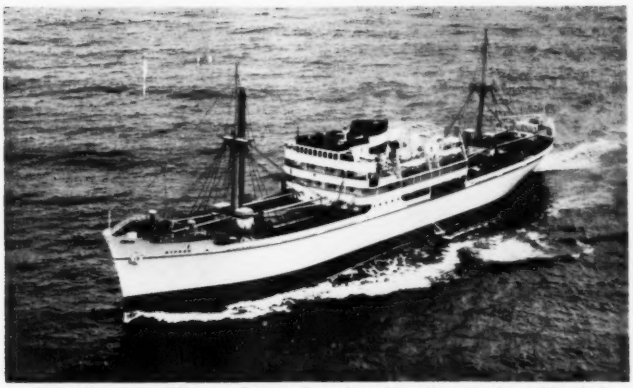

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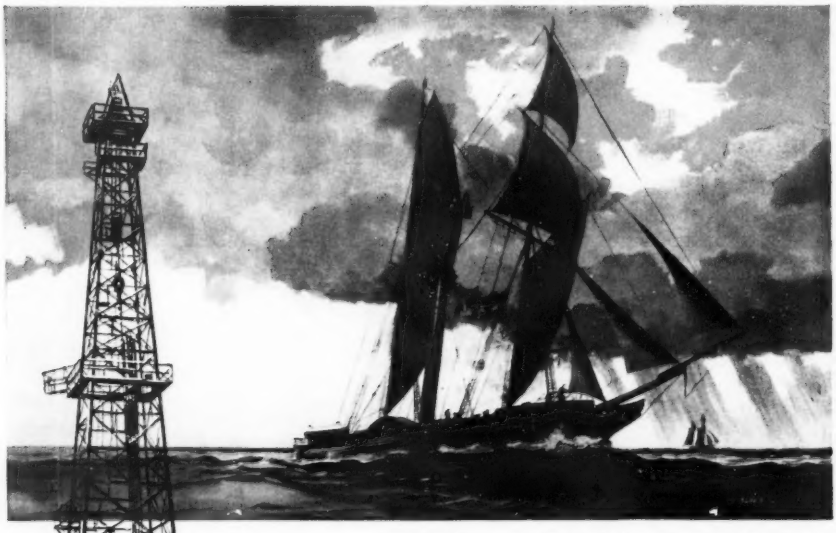

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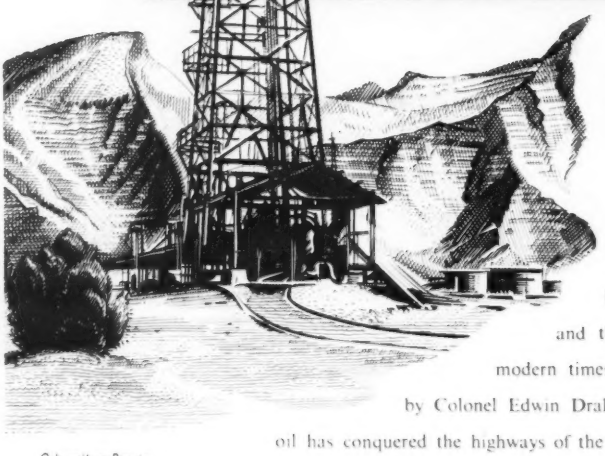

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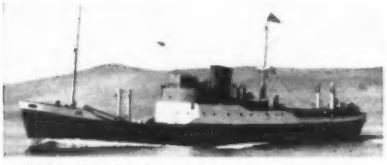

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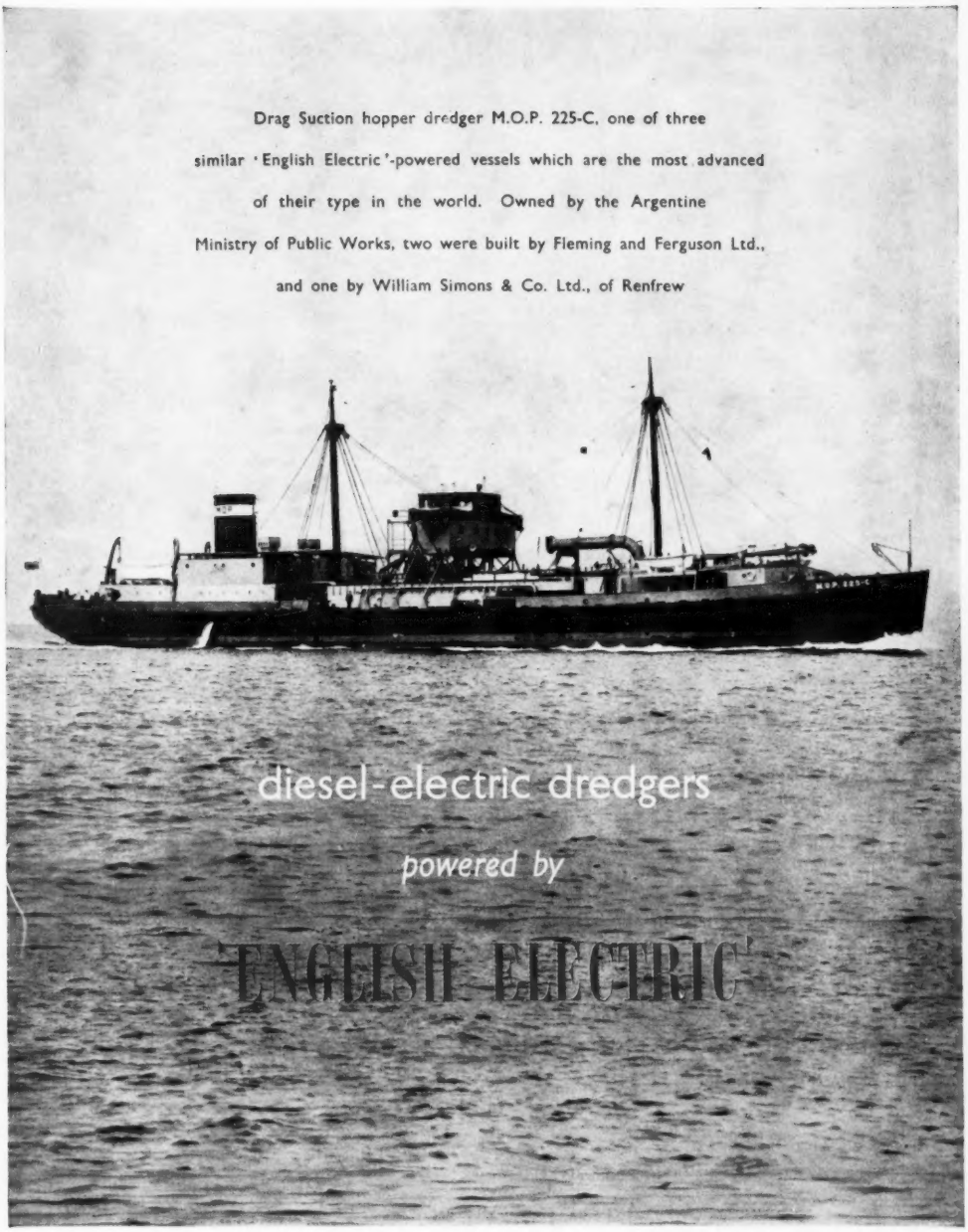


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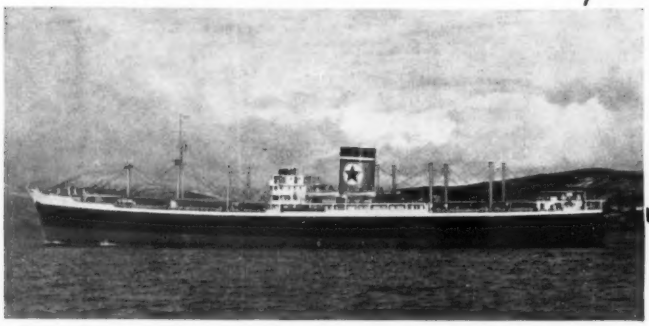

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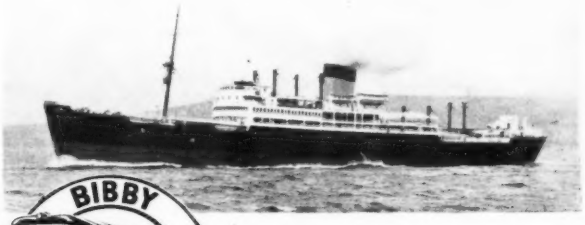

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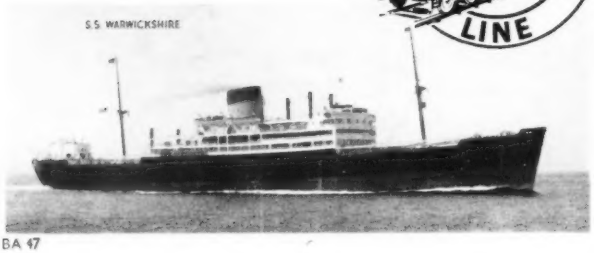

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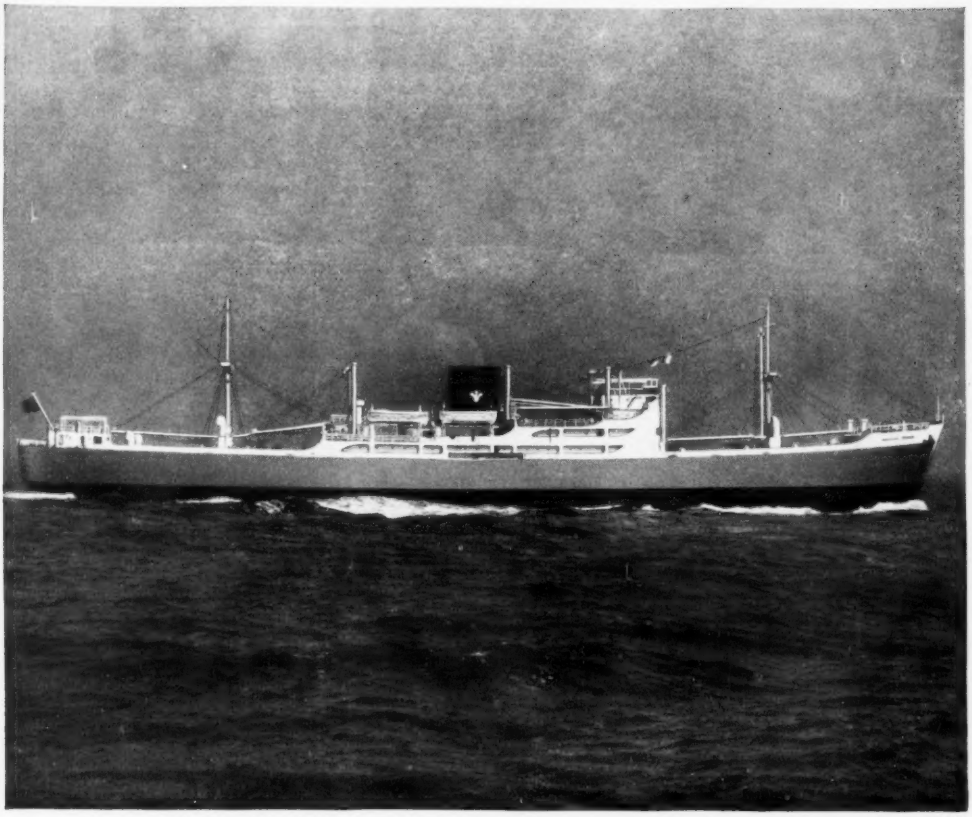

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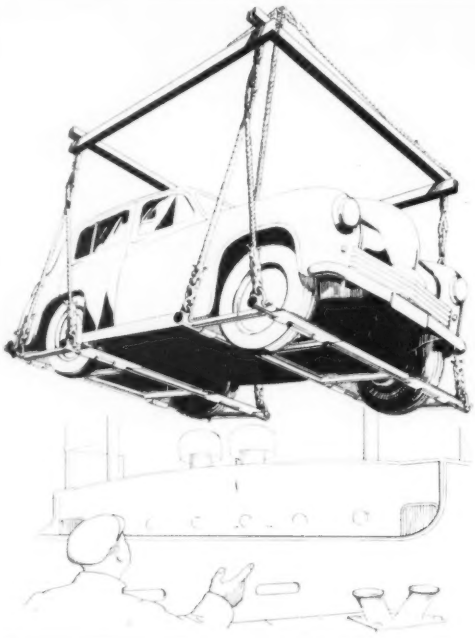

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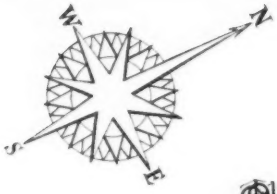

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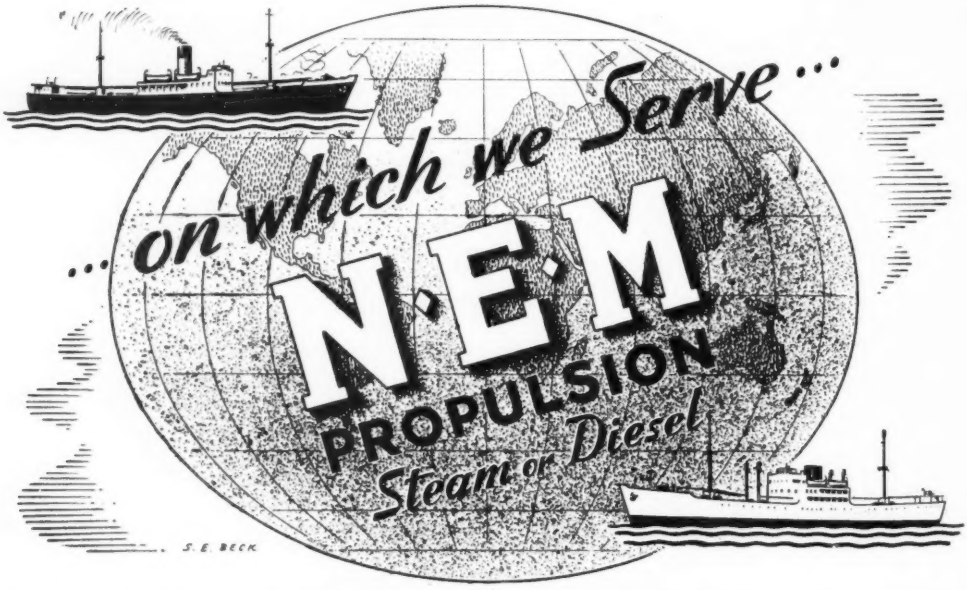


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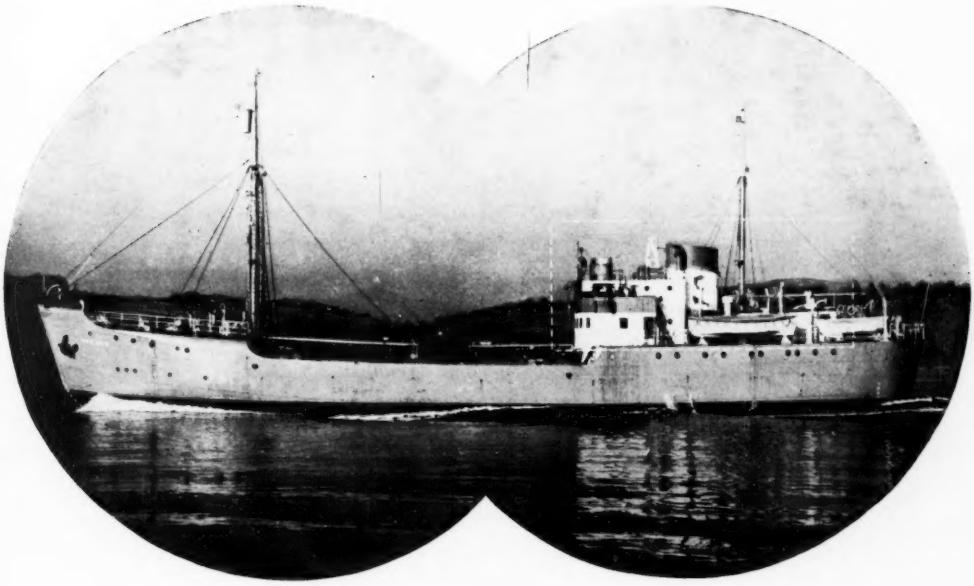

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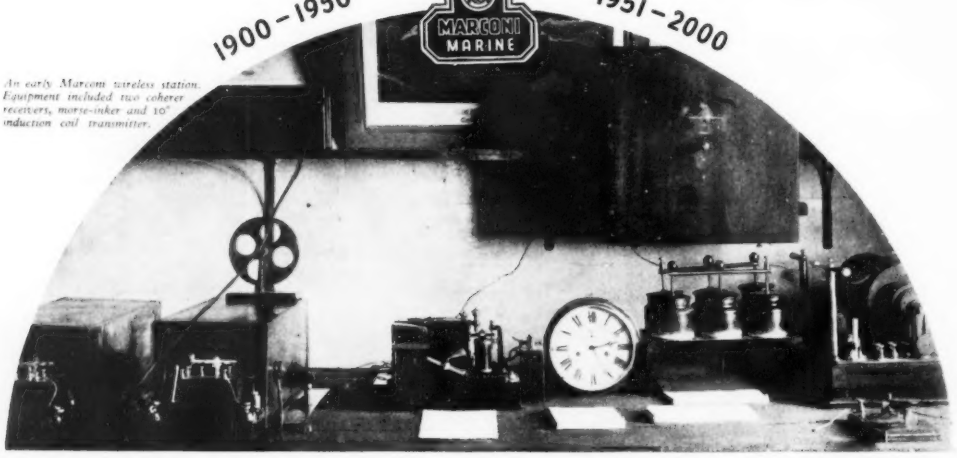

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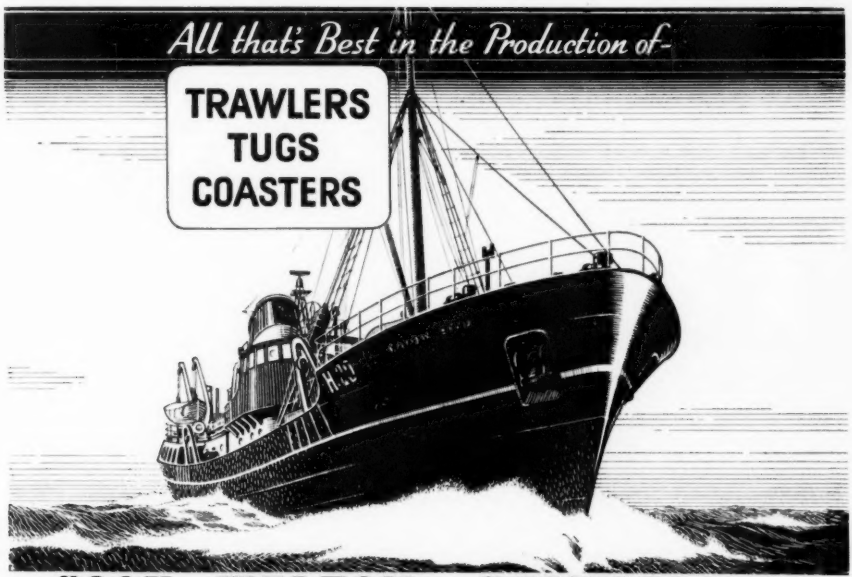


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# FUNDAMENTALS OF DEFENCE

ONE of the most extraordinary features of the present political situation is that there is greater unanimity in support of the defence programme from the Opposition than from Government supporters. There can be little doubt, however, that before the measures proposed are discussed in the House of Commons both sides will acknowledge, with few dissensions, the need for rearmament to maintain peace. Whether support for Mr. Attlee from his left wing element will be due to a change of heart, or a fear of the results of going to the country after a defeat in a division, must be a matter for opinion. It can also be forecast that while there will be general support for rearmament there will be a wide division on the details of defence measures in particular, or the usefulness of a fortnight's training for men in the Z reserve. It is even possible that debate on these and other details, important in themselves, may become so heated as to obscure the vital fundamentals in the costly task of defence for Britain in the postwar world.

The first essential is neither economic or military. It is the pressing need for unity among all sections of the nation and the Empire and Commonwealth. This is no time for political mud-slinging or for legislation based more on so-called retribution than on the sound principles of commonsense. The nationalisation of steel on February 15 and the insistence upon this measure, despite the changed circumstances since it was debated, form a negation of the spirit of national unity. Its repeal, even at this late stage, would be a clarion call to industry and labour alike and would form the writing on the wall for all those with a vested interest in division of the people. Before coming to economic and military aspects, there is a wider issue which was stressed by Mr. Attlee. The British defence programme is not merely vital to the safety of this country; it forms an integral part of the whole North Atlantic defence system, which can only be as strong as its weakest link. In the economic field it will be inevitable that preoccupation with rearmament will reduce the exports of many industries and, in particular, owing to the degree to which warfare has been mechanised, it may be that the motor car industry will not be able, with the supplies of materials available, to maintain the high level of car exports which it has achieved since the war. A note of caution must be sounded at this point, however. While it is highly regrettable that owing to car production being curtailed, car exports may drop and the waiting list for the home consumer go up from 5 or 6 years to infinity, it is undisputable that life in this country could, nevertheless, continue.

There must be no assumption that a similar situation will arise if the output of the shipbuilding and marine engineering industries were similarly to be curtailed. It has been said that the defence programme must interfere as little as possible with our economic recovery; it must enable us to build up our military forces to the level required by our commitments under the North Atlantic treaty; and it must permit the stockpiling of strategic materials as a safeguard against the event of a third World War. For each and every one of these aims the necessity to maintain shipbuilding production at its highest level is paramount. In the inter-war years the shipbuilding industry, by a strenuous effort of self help, was enabled to survive and meet all the many and varied demands made on it during the Second World War. Unfortunately, no industry can be self-sufficient in these days when all human activity is controlled from Whitehall, and it is surely little to ask that the Government should clearly state not only that they realise the economic and military value of this and other maritime industries, but that they will ensure that steel and other materials for the purpose will be made available to maintain the highest level of production. The Admiralty programme, under rearmament, is not yet clear. There may be good reasons of security for not announcing the full scope and nature of the final plans, but it is quite certain that during the next three years it will form an appreciable added load, requiring its own supplies of materials and labour resources. The whole nation should be grateful for the fact that never before has the British shipbuilding industry been better placed to meet future demands, whether they be for the days of semi-peace or, ultimately, those of war.

# Current Events

### Rearmament and Labour Disputes

IT WAS not surprising in view of the weakening faith of the rank and file members in the leaders of the trade unions, now so closely allied to the Government, that as the time approached for tackling the rearmament programme labour troubles began to develop. In particular, agitators, whose membership of or sympathy with the Communists has been well known, have been active in urging various bodies of workers to go slow, a number of specious excuses being made for such appeals. The first sign of trouble occurred in a foundry where the go-slow action of certain men led the employers to issue 200 dismissals and decide to close the foundry in which they worked as it was not economic to carry it on with the men on time work only. This raises the question whether an employer has a right to do what he likes with the buildings and plant which he or his shareholders have provided. This trouble at Stockport was coming to a head when a dispute was fomented on Merseyside by the Communist leader of the shiprepairing workers. At the time of writing, an attempt is being made to arrange a

meeting between representatives of the Confederation of Shipbuilding & Engineering Unions and the Engineering & Allied Employers' National Federation so as to get to the bottom of the matter, which might affect about 25,000 workers on the North West Coast, with the prospect that the agitators may drag in the men in other districts. The plea which is made publicly, whatever the real objective of the movement in its reaction on the rearmament programme, is a comparatively simple one. It is claimed by the pieceworker that the new wages agreements concluded for the engineering industry last November and for shipbuilding in December did little more than improve the minimum rates and did not result in a pay increase for all workers. It is reported that in a few cases employers have conceded the men's claim for increased pay for piece work. But where employers have stood firm many piece workers have abandoned piece work and demanded to be paid at the minimum time rates. Others have also introduced a ban on overtime. At the same time attempts are being made to foment a nation-wide dock strike. So there is unhappily the possibility of trouble on a scale which would seriously interfere with the progress of the large volume of tonnage which is now under construction and the movement of cargoes.

## The Legal Issues

WHAT the outcome of the present labour troubles may be, not forgetting the dispute over pay in connection with the Festival of Britain, it is impossible to foresee. But it is apparent that the leaders at Transport House are being defied and efforts made to embarrass the Government as it completes its rearmament plans. Of course, the Communists have denounced these defensive measures for many months past and it looks as though, having talked, they are now acting. The responsibility for defending the country is the task of the Government and the responsibility of seeing that enemy agents do not break the law and thus interfere with rearmament, rests with the Attorney General, who is the legal representative of the Government. Sir Hartley Shawcross has explained his position. He has to interpret the law without regard to the interests of any political party or any other interest. He has stated that there have been strikes in the past in which he could not prosecute because technically there was no trade dispute, and several where he was about to prosecute when the strike collapsed. He prosecuted in the case of the gas strike in North London recently because the public were being caused great inconvenience and hardship.

## The Hidden Hand

Information showed that while a pretence was being made of urging strikers to return to work, the truth was that the Communists were anxious to see the strike continue. There was the North London organiser for the Amalgamated Engineering Union, an avowed Communist, whose official duty to his union was to secure return to work but who bent his unofficial efforts in the opposite direction. In his office, as a mere clerk, as nominally he was, or as an invigilator over the organiser, as in accordance with Communist technique he might be, was a man who was implicated in the Communist conspiracy in Meerut, and who in this country in 1938 got six years' penal servitude. Sir Hartley claimed that in that case the strike prosecution brought home to everybody that what was the point was not really some matter of industrial regulation, but that criminal law was being broken; and the prosecution had a salutary effect. On the other hand, he did not think that law and order were necessarily promoted by prosecution in every case, but nobody should think he would be likely to refrain from prosecuting in any properly established case. All who are concerned for the safety of this country in case of war will await anxiously for indications of the reaction of Ministers, and particularly the Attorney General, to the latest crop of labour troubles, which, unless settlements are reached, must delay rearmament.

## Waste of Shipping

MINISTERS are curiously unconscious that they live on an island and that any action which they may take should be considered from the point of view of sea transport. The Minister of Fuel and Power is an outstanding sinner in this respect. He condoned the action of the National Coal Board when it promised to sell large quantities of coal overseas, though he should have foreseen that supplies would not be sufficient to enable those contracts to be fully honoured. So, in the resultant emergency, a large number of ships have had to be diverted to bring American coal across the Atlantic, a distance of 3,000 miles or so. This action represents a great waste of tonnage. The Minister of Food is another sinner. His dispute with the Government of Argentina has led to a further waste of tonnage, as Mr. W. C. Warwick, the chairman of the Houlder Line, Ltd., explained to his shareholders when commenting on the stoppage of meat exports from that country. He pointed out that the shipowners were still without news of the many discussions that had taken place from time to time regarding a new trade agreement. There have been occasions during the past few weeks when it was recorded that the outstanding differences were on the point of adjustment, but now negotiations have again come to nought. So the disorganisation of shipping continues and Mr. Warwick and his colleagues may have to contemplate further employment of their specialised refrigerator ships in other trades. Mr. Warwick remarked, in this connection, that, in these days of intensified rearmament, one aspect of the maintenance of beef imports from the Argentine was the strategic importance of securing food supplies from the nearest points of supply. He remarked that ships perform the round voyage to and from the Argentine in about one-half the time required for a round voyage to Australia or New Zealand. "This surely is a factor that so far would not appear to have received the attention and consideration which I think it deserves." So this is another way in which the country is paying the price of bulk buying with all its disorganisation of shipping, its waste of tonnage and its hardship in homes in these islands owing to reduction of supplies of meat, not forgetting that the ration is now little more than a pennyworth of meat a day, apart from a minute quantity of corned beef. On this starvation basis, the country is urged to rejoice, shouting with joy and dancing at the Festival of Britain!

## Cost of Delays in Ports

SHIPOWNERS have repeatedly declared that unless the turnround of ships in certain ports were speeded up they would have to raise freight rates. It cannot be said that shippers anywhere have taken the matter as seriously as the situation demands and in a good many cases they have done nothing by cooperative action to improve matters, though it has been obvious that they are dealing with a concerted movement to hold up the trade of the democratic nations which are trying to defend not only their liberties, but their way of life, which depends, in the last analysis, on the smooth and rapid flow of goods from port to port. Now shipowners, having talked in vain, are taking action in some of the most flagrant cases of waste of tonnage, which means waste of money. Reports of such action have already appeared in THE SHIPPING WORLD. Now owing to the grave congestion at Santos and a worsening of conditions at Montevideo, appropriate measures are to be adopted at those ports, as they have been recently imposed elsewhere. The United Kingdom/Brazil Conference Lines have announced that congestion in Santos has assumed such serious proportions that the lines are imposing a surcharge of 25 per cent on the freight on all cargo destined to that port by vessels loading on and from February 8.

Similarly, the U.K./River Plate Conference has stated that conditions in the port of Montevideo, which have been unsatisfactory for some time, have deteriorated so much that, in order partially to offset the heavy additional costs, it is instituting a temporary freight surcharge of 25 per cent on all cargo destined to that port. Such action is the inevitable reaction to the increasing time which ships have to spend in many ports when they should be earning their keep at sea. Shipowners have spent vast sums in building swifter vessels so that trade might move more rapidly, to their own advantage and that of their customers, but their enterprise has been defeated by the failure of the authorities at many ports to see that a quick turn round is made. Ships, unless they are at sea, are money losers instead of money earners and, since owners have no crock of gold into which they can dip, they have to pass on the extra charge to the shippers and, in the result, consumers must, of course, suffer.

## The Mental Approach to Work

DURING the sixth "Manchester Association of Engineers Lecture" which was given by Sir Claude Gibb on Friday, the author devoted the early part of his paper to what he described as "the mental approach to the whole problem of work," which, he emphasised, had the greatest effect on costs and on quality of production. The reports of the teams sent out to the United States under the auspices of the Anglo-American Council of Productivity invariably indicate a fundamental difference among all ranks in their attitude to work. The American worker, whether he is a manager or a machine operator, has a pride in his job which used to be present in Britain as an intense pride in craftsmanship, but which has been largely lost and which has not yet been replaced by any other equally satisfying form of pride. Sir Claude Gibb emphasised strongly his opinion that the greatest factor in increasing industrial efficiency (the title of his paper was "Planning for Production Efficiency") is a change of mental attitude throughout the whole of British industry. How can this be brought about? First and foremost, Sir Claude thinks that there must be a knowledge on the part of every man on the payroll of the part he plays in the ultimate product and, further, what part that product plays in the national economy and in contribution to world wellbeing. Additionally he must have conditions of employment which assist in the restoration of pride and in stimulating the whole activities of his life. The use of colour in the workshop, the insistence on cleanliness and accident prevention, for example, are necessary as part of the mental change which must take place. Every American boy he said, believes that he has a good chance of ultimately becoming a chief executive in his firm. That is an example to be followed in this country.

## Good Results

STOCKHOLDERS of Smith's Dock Co., Ltd., have every reason to be satisfied with the results set down in the full report for the year to end-September last, and prospects are encouraging as far ahead as 1954. Much of the company's success is due to the directors' foresight in making early plans for the building of large tankers. Capital expenditure has necessarily been heavy—there are still commitments of nearly £1,000,000 outstanding for the building of the largest privately owned dry dock on the North East Coast—but is already reaping a rich harvest. Profits rose in the year under review from £778,000 to £949,000 and, after tax of £417,000, there was left a net surplus of £392,000, compared with £317,000. Distribution policy remains very conservative: that must be in view of the substantial outlays on capital account. As much as £300,000 of the year's available profit is transferred to plant improvement and extension reserve, with a further £35,000 allocated to the taxation equalisation account. The repeated dividend of 10 per cent takes no more than £55,000 net. The liquid resources, augmented by £1,291,000 received on account of work in progress, look ample. At the close of the financial year, cash and tax certificates totalled £859,000, while net working capital was £1,537,000. The reserves have reached an imposing dimension: including the future tax provision of £295,000 they aggregate £2,235,000, or more than double the issued ordinary capital of £1,000,000. The chairman, Sir G. Tristram Edwards, takes a confident view of the outlook, as he is well justified in doing. In the shipbuilding department, there is every hope that output for 1954 will soon be booked up, and in the case of shiprepairing, though forecasting is here rather more perilous, there is promise of steady employment for the current year at least.

## Conservative Finance

IN THE formation of market prices preliminary statements are as important as the full annual report and accounts. That fact is not yet fully realised despite the publicity given it by the Stock Exchange and other organisations representing investment opinion. Some few weeks back J. Samuel White & Co., Ltd., announced profits, after tax, for the year to September 30, 1950, of £62,000, against £31,000. The full report now available shows this striking improvement to have stemmed not from increase of trade, but from the crediting of £48,000 of profit relating to earlier years. Trading revenues actually fell from £138,000 to £121,000. The maintained ordinary dividend of 12½ per cent absorbs £19,250 only, however, and involves no departure from the company's normal practise of conservative finance. The fall in the trading figure is attributed by the chairman, Mr. J. A. Milne, to a combination of higher manufacturing costs, a temporary decline in the ordering of new ships and a more than usually severe seasonal drop in the demand for the refrigerator components made at the company's Somerton factory. The engineering works were, however, kept fully employed on turbines for power stations, auxiliary generators and boilers. The prospect for the shipyard is encouraging and rearmament should provide ample work on the smaller craft in whose building it specialises. Financial resources for an expansion of activity are sufficient. Current assets were £1,118,000 at the date of the balance sheet and included £329,000 in cash and tax certificates. The net working capital was £597,000, while capital commitments were modest at £35,000. The reserve position is as strong as the liquid position; capital and revenue reserves (including future tax, etc., of £96,000) amount to £511,000 compared with the issued ordinary capital of £280,000. Negotiations are taking place which should provide alternative profitable work for the Somerton works.

## English Steel Compensation

SATISFACTION has been expressed over the compensation awarded to the English Steel Corporation, a private company whose share and debenture capital is jointly held by Vickers and Cammell Laird. The award—the shares and the debentures have been valued after negotiation between the Ministry of Supply and the Stockholders' Representative, since there were no market quotations—means little short of 25s. per £1 ordinary unit of Cammell Laird & Co., Ltd. In general, the shares of iron and steel companies vesting in the British Iron and Steel Corporation on February 15 have been given a more adequate compensation where the figure has been decided by negotiation rather than by the use of market values related to dates named in the Iron and Steel Act. The total sum awarded English Steel was £22,129,000. Of this, £3,901,000 attaches to the £2,229,000 of the Corporation preferred capital, while £17,250,000 goes to the £1,131,000 of deferred shares and £978,000 is the agreed value of the £851,000 of debenture stock. Vickers hold all the debenture stock, 81 per cent of the preferred and 65 per cent of the deferred shares, the balance being owned by Cammell Laird. The former will receive some £15,300,000 of the total award, and the latter will take the rest. Naturally,

there is keen interest in the disposal of these large sums. How will the companies deal with them? The companies have issued a joint statement to the effect that it will be some time before any indication can be given of the way in which the compensation money will be treated. It does, however, seem probable that part of the award will be retained for development purposes by the two companies and part distributed by way of a repayment of capital.

## "Clean" Bills of Lading

IN THE annual report of the Institute of London Underwriters, attention is drawn to the revised definition of a "clean" bill of lading, adopted at a conference of the International Chamber of Commerce held in Paris in April last. For some reason that is not apparent this matter did not receive the publicity it deserved at the time the revision was made, but the litigation concerning the meaning of a "clean" bill now before the United States Courts proves how necessary it is that there should be a clear understanding of the term. The definition reads:—

> A clean Bill of Lading is one which bears no superimposed clauses expressly declaring a defective condition of the goods or packaging.
>
> *Footnote*: Bills of Lading should be considered clean even if they contain clauses:
>
> (a) which do not positively assert that the goods and/or packaging are unsatisfactory, but suggest that such may be the case, e.g., secondhand cases, used drums, etc.;
>
> (b) which emphasise carrier's non-liability for risks arising through the nature of the goods and/or packaging;
>
> (c) which disclaim on the part of the carrier knowledge of contents, weight, measurement, quality or technical specification of the goods.

This is a commonsense definition which should commend itself to shipowners, cargo owners and underwriters alike. Whether it is one that will commend itself to banks is another question. All an underwriter wants to know from a bill of lading is that the cargo which he insures was loaded in apparently good condition—that it has not incurred damage prior to shipment which may have been incurred before his risk commenced. To a bank, however, the bill of lading is part of the documents on which the security for financing a shipment depend, and that security may be diminished by any suggestion that its concrete basis is not sound. Indeed the whole question of the relation between banks and underwriters in connection with shipping documents is one which might well be explored in far greater measure than hitherto. Banks naturally require the most comprehensive insurance cover obtainable, but it may be that they go too far when, as revealed in Mr. A. W. Theobald's speech at the annual meeting of the Institute of London Underwriters, they require textiles to be insured against "leakage" and machinery against "hook damage."

## Loss of the "Indian Enterprise"

WHAT caused the steamship *Indian Enterprise* to blow up, on a calm clear night in the Red Sea in June last year, with the loss of all but one of her crew of 74? No one will ever know the certain answer, but the Ministry of Transport Court of Inquiry has considered the question earnestly in an endeavour to gain, if possible, knowledge of benefit to the maritime community. Every possible cause was considered in the light of such evidence as was available. There were no grounds for supposing, for example, that the ship struck a mine. On the other hand, the violence of the explosion, which was witnessed from two other ships, and the fact that the *Indian Enterprise* carried a part cargo of explosives, makes it sure that for some reason the explosives were responsible for the disaster. Yet there was no likelihood of the explosion being caused by an electrical disturbance; the wire of her echo sounder which led through No. 1 hold would have been dead on a clear night in deep water, and since the weather was calm there would have been no danger arising from spillage or friction of the explosives in the specially-constructed magazine. No part of the general cargo was liable to spontaneous combustion, nor did the explosion arise from the so-called dangerous cargo (acetic acid, etc.) stowed on deck aft in accordance with regulations. On the other hand, during loading, it had been noted that some containers of a consignment of rockets had been affected by water and it is possible that subsequent deterioration of these containers, combined with heat, had led to decomposition and self-ignition; certain other compositions were carried which had a low ignition temperature and could be affected by heat and moisture to promote self-ignition; and finally the possibility of deliberate sabotage could not be definitely ruled out, despite the security precautions which had been taken. The Court determined that any of these three factors could have caused the loss of the *Indian Enterprise*, but it was left with a suspicion that the second was more probable. The Court made no recommendations, but it can be readily assumed that shipowners who have to accept consignments of similar cargoes will carry out even more stringent precautions.

## The New Werkspoor-Lugt Engine

THE FIRST Werkspoor-Lugt two-cycle oil engine, which has now completed shop tests in the works of Werkspoor N.V., Amsterdam, warrants special attention by virtue of the many new features which it introduces and, more especially, for the savings in weight and space which are claimed for it. This engine was designed by the late Mr. G. L. Lugt, chief diesel engineer to Werkspoor for many years, who died while his engine was being developed. The work was continued by Mr. F. G. van Asperen and an experimental engine was subsequently built and subjected to extensive trials. This experimental unit was described with drawings in THE SHIPPING WORLD of January 28, 1948. The new engine, built for installation in a ship, is a single-acting two-stroke engine with four cylinders having a diameter of 600 mm. and a piston stroke of 900 mm. It is rated at 1,800 b.h.p. at 165 r.p.m. As this power is sufficient for the requirements of the owner, this engine is not supercharged, although it is understood that the next engine, of similar cylinder dimensions, will be tested as a supercharged unit and it is expected that it will develop about one-third more power—2,400 b.h.p. Special features of the new engine include the elimination of the camshaft and the adoption of through-scavenging with four exhaust valves per cylinder, the valves being operated from a vertical lever. This lever is arranged to operate two pull rods, each of which in turn operates two valves. Scavenging air is supplied by independent side scavenge pumps, one to each cylinder. There is also one fuel pump to each cylinder, these being actuated by the crankshaft. Easy starting and a high degree of manoeuvrability are other features of this engine, which is designed to operate on boiler fuel with a viscosity of 3,500 secs. Redwood 1 at 100 deg. F. The fuel consumption is given as 160 grams (0.352 lb.) per b.h.p./hr. at between 75 per cent and full load.

## SAYINGS OF THE WEEK

### THE CLOCK AND THE PAY PACKET

"The majority of workers in nearly every industry seem to have one eye on the clock and the other on the pay packet, with little or no thought of giving a fair day's work for a fair day's pay."—*Mr. F. G. Wallis*, President of the Electrical Contractors' Association.

### SHIPPING AND THE WAGE PROBLEM

"I think the industry ought to be very proud of the way it has handled its wage negotiations recently. We have not seen a lot of publicity about difficulty concerning seamen's wages."—*Colonel A. C. Tod*, chairman of Elder Dempster Holdings, Ltd.

# ON THE "BALTIC"

## SUSTAINED INTEREST IN FORWARD CHARTERING

By BALTRADER

A SURPRISING volume of shipping has been chartered in the past two months, and still the demand continues. Fewer fixtures are being arranged in some directions, but the supply of unfixed ships available for early loading is much reduced. For instance, inquiry on the Baltic Exchange reveals a minimum of tonnage which could proceed to the North Pacific coast to load within the next two or three months. For later positions in various markets it is noticeable that owners are willing to cut the rate in comparison with what has been paid recently for early loading. Even so the rate is very high, and it is an indication of charterers' expectation of continuing demand that they are chartering at such high cost as far ahead as May and June. As an example, half a dozen vessels were taken the other day for ore from Malaya to Japan, with cancelling dates in May, at 72s. 6d. per ton, and four were chartered for May/June at 70s. It is true that 80s. was lately granted for earlier loading, but as recently as December the current rate was 37s.

### Time Charter Market Steady

Inquiry for tonnage on period time charter points the same way, for operators would not be chartering at between 30s. and 40s. per ton per month for periods of six months or more if they thought that there would be an early relapse. One of the ingredients of the freight market is the large movement of manganese and other ores to the United States from West and South Africa, Brazil, Norway, the Mediterranean, India and the Far East; an increase rather than a reduction in this important trade is likely in the coming months. The South African coal exporters find it is difficult to attract as much tonnage as they require. This is shown by the payment of 110s. per ton many times from Durban or Lourenco Marques to West Italy, and 102s. 6d. for consecutive voyages over the rest of the year with South African coal to Chittagong. At the same time coal is to come from Chittagong's near neighbour, Calcutta, to West Italy. The sad condition of world politics is shown by the fact that soya bean meal on its way from the U.S. Gulf to Japan will pass the ships taking similar cargoes from Manchuria to Europe.

### Problem of Port Congestion

The recent slight weakening of the North Atlantic market is no longer noticeable as a result of more urgent demand for American coal on the Continent and in the United Kingdom. In this connection, events have confirmed the doubts mentioned in this column in December as to the possibility of avoiding some delay and congestion in discharging a large number of ships laden with coal. In fact it is proving difficult to accommodate ships arriving in this country with coal, added to the constant succession of ore ships occupying the grabs. It was reported the other day that several big ships were waiting their turn at Cardiff and that it was actually proposed to divert them to Rotterdam. The coal would then be transhipped to coasters to be distributed at small U.K. ports. In the urgency of the moment when it was decided to import coal, the liner companies were persuaded to divert their ships from their normal routes and send them to Hampton Roads. Some of this tonnage, having more than two decks and being entirely unsuitable for grab discharge, has received deplorable dispatch in discharge, which has further dislocated the sailing schedule on return to the regular service. One of the difficulties in dealing with our heavy imports is shortage of wagons and this in turn has been aggravated by lack of adequate manpower on the railways caused by the prevalence of influenza.

Last year the Mauritius to U.K. sugar season opened with rates of freight in the neighbourhood of 47s. 6d.; this month business was done at 120s. per ton for sugar in bags, followed by a fixture at 110s., free in and out, for 7,000 tons of bulk sugar. The carriage of sugar in bulk seems to have proved itself in the past year for vessels of moderate size. Several British colliers of 2,000 and 3,000 tons capacity were fixed recently with this cargo from Puerto Rico to London River. Colliers are, of course, ideal for the work, owing to their large hatches and clear holds, designed for rapid discharge with grabs. In London it is estimated that discharge can be effected at from 1,500 to 1,750 tons per day. This compares with a usual 1,000 to 1,200 tons per day in the case of bagged sugar. In the latter case more rapid discharge is sometimes achieved, but only with picked gangs and great physical effort.

### The Freight Markets

Although less business has been arranged than in previous weeks, the market is fully steady and charterers find difficulty in covering their requirements. Increased demand for coal carriers from the United States to Europe has caused owners to maintain an attitude of reserve. Hampton Roads to Rotterdam, coal, has been arranged at $12, and Hampton Roads to West Italy at $13 for early loading. The *Richard D. Lyons*, 9,200 tons, was fixed, Hampton Roads to Dublin, at $12 for March loading, followed by a trip at the same rate and a third at $11.50. There is good inquiry for grain shipment from the North Atlantic and Gulf of Mexico. The *Acheo*, 42,000 quarters, obtained 24s. per quarter for heavy grain from St. John or Halifax to Eire, March loading. Durban or Lourenco Marques to Genoa or Savona has been fixed at 110s., coal, for as late as June 15 cancelling; Durban to Aden, coal, has paid 97s. 6d., March. Australian charterers have not had much success in interesting owners. A W. R. Smith vessel is fixed from British Columbia to Cape Town-Durban at 152s. 6d., wheat in bulk, May 25/June 30. Wales to Buenos Aires, coal, has been reported at 70s. per ton for early March loading. The River Plate grain market is firm and 150s. has been conceded from up River to East Coast India, heavy grain, February/March. A vessel guaranteeing 65 ft. per ton has been chartered from up and down River to Gothenburg-Malmo range at 137s. 6d. per ton, basis heavy grain, March 24/April 24.

On time-charter basis fixtures are less frequent than formerly because the liner companies withhold inquiry as far as possible. Other operators, mostly American, offer high rates for fairly long periods. The *Grelrosa*, 10,090 deadweight, 10 knots on 24 tons oil, was fixed last week for a West African round at 32s. 6d., delivery E.C. U.K. or Continent in March.

### Air Charter Business

Less business in the past week is reported by air charter brokers, but inquiry continues for passenger travel in the summer months. There is also active interest in air transport of pigeons in the coming season to places on the Continent, returning with the empty baskets. For account of the War Office a Dakota is chartered to take passengers to and from Malta. A Dakota is chartered to carry a helicopter to Durban for a crop-spraying job. Carriage of helicopters in this way to distant areas of operation is usual on account of the saving of time in the hire of a valuable and specialised type of aircraft.

# Houlder Line, Ltd.

## The Argentine Meat Trade

### Mr. Walter C. Warwick's Views

THE ANNUAL general meeting of Houlder Line, Ltd., was held on January 29 at the registered office of the company, 53 Leadenhall Street, London, E.C., Mr. Walter C. Warwick (chairman of the company) presiding. The chairman said:

Shareholders will no doubt have had an opportunity of reading the statement which I circulated along with the company's report and balance sheet and I have really nothing to add this morning to that statement. Unfortunately, we are still without any news of the many discussions that have taken place from time to time regarding a new trade agreement between this country and the Argentine. There have been occasions during the past few weeks when, judging from Press reports, the outstanding differences were on the point of adjustment, and it is very disappointing that a general settlement has not yet been achieved.

It may, therefore, be necessary to contemplate further employment of our specialised refrigerator ships in other trades, and I would repeat the assurance I have already given that the company's interests will be safeguarded in every possible way in the very difficult conditions we have to face up to at the present time.

In these days of intensified rearmament, one aspect of the maintenance of beef imports from the Argentine is the strategic importance of securing food supplies from the nearest points of supply, and it is important to remember that ships perform the round voyage to and from the Argentine in about one-half the time required for a round voyage to Australia or New Zealand. This surely is a factor that so far would not appear to have received the attention and consideration which I think it deserves.

The report and accounts were unanimously adopted and the dividend as recommended of 7½ per cent, less income tax, on the ordinary share capital, was approved.

The retiring directors, Mr. Walter C. Warwick and Mr. Maurice C. Houlder, were re-elected; and the remuneration of the auditors, Messrs. Gane, Jackson, Jefferys and Freeman, having been fixed, the proceedings terminated with a vote of thanks to the chairman, directors and staff.

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# INCREASED PAY FOR DOCKERS

## Restatement of Principles Governing Mechanisation

NEGOTIATIONS on a claim for an increase in the wages of dockworkers presented by the trade union side of the National Joint Council for the Port Transport Industry have been concluded, and a new agreement will come into effect on February 12. The agreement provides that: (1) time workers whose present daily wage is 19s. shall have an increase of 2s. per day, bringing their minimum daily wage on a half-daily basis to 21s.; (2) piece workers are to have appropriate increases in their piecework rates; (3) the weekly wages of permanent men are to be increased by 11s. per week.

A statement issued on behalf of the National Joint Council for the Port Transport Industry states that in order to promote efficiency and smooth working in the industry, the Council is restating in the agreement certain principles which govern the introduction of mechanisation, the determination of manning scales, the approach to restrictive practices, and unauthorised absenteeism. Of the 90,000 dockers involved 95 per cent are on piece work and adjustments will be made in the percentage additions on their pay. Where the addition is at present 35 per cent it will go to 45 per cent, and where it is 25 per cent it will be increased to 34. Percentage additions of 10 per cent will increase to 18, and 5 per cent to 12½ per cent.

In small ports outside the Dock Labour Scheme, the present differential of 1s. a day less than the principal ports will disappear, so that the minimum day wage will be 21s. throughout the country.

# BOOK REVIEWS

*Fruit Annual*, 1950/51. (British-Continental Trade Press, Ltd., 222 Strand, London, W.C.2. Price 20s.)

The new edition of this yearbook and directory of the fruit trade contains, among other useful items, an article outlining the progress which has recently been made in the quick freezing of fruit. Other articles deal with the transport of fruit by sea and by air, including an account of ships recently put into service for the carriage of fruit and a list of shipping companies and their specialised fruit carrying ships.

*The Year Book and Guide to Southern Africa*, 1951, and *Year Book and Guide to East Africa*, 1951. (Published for the Union-Castle Mail Steamship Co., Ltd., by Robert Hale, Ltd., London. Prices, 8s. 6d. and 6s. respectively).

Until last year these reference books were published as one volume under the title of "South and East African Year Book and Guide." The separation of the volumes has enabled more individual attention to be given to the two areas covered by the guides. The interval since the publication of the 1950 editions has been well used, much revision having been undertaken and new features incorporated. In the book on Southern Africa 13 route maps appear for the first time, showing both road and rail routes. Distances are also a new feature. In the South West African section the general and travel information has been completely revised. The East African volume has received careful revision and one feature of this book is the 16-page atlas in colour. Also included is a large folding map of Africa and some 19 maps and plans in the text. Both these volumes are invaluable assets to those interested in the sub-continents of South and East Africa and they have the added attraction of being presented in handy form.

*How to Write Technical Books*, by John Gloag. (George Allen & Unwin, Ltd., Ruskin House, 40 Museum Street, London, W.C.1. Price 12s. 6d. net.)

A technician, whether he be an engineer, naval architect, metallurgist, chemist, or any other specialist, may be the leader in his own field, but not necessarily an author or a journalist. This means that when the occasion arises, as it frequently does, for him to explain in writing to non-technical people the principles of his own subject, or when he has to teach younger members of his own profession, the technician is faced with an entirely new task. He is familiar with books, of course, but that is not the same as knowing how to write one. It is surprising that until the publication of Mr. Gloag's recent work on the art of science of writing technical books, there have been few, if any, reliable guides available. The subject is dealt with from the first stages, including the different types of typewriter available, preparation of the typescript, the use of plain language with the minimum of technical terms where normal English would suffice, and the dangers of over statement. Other chapters deal with the use of illustrations, line and half-tone blocks, agreements between publisher and author, and in fact every aspect of the subject. Mr. Gloag's work can be strongly recommended.

*A Century of Technology*. Edited by Percy Dunsheath (Hutchinson's Scientific and Technical Publications, Stratford Place, London, W.1. Price 15s.)

Although there are opposite views on the desirability of holding the 1951 Festival in these troubled times, it will generally be recognised that since the 1851 Exhibition, there has been a century of advance and development in scientific knowledge and technological achievement far beyond any other time. Much of the progress which has been made was, in fact, foretold by exhibits showing early phases in 1851, and it is therefore an eminently suitable time for a book reviewing technological progress in all its many fields. Obviously, it would be difficult for any one man adequately to cover the ground and the publishers of this volume have wisely adopted the course of appointing a team of 17 specialist authors, all authorities in their subject, to contribute chapters, under the editorship of Mr. Percy Dunsheath, who himself has written on electrical engineering and technological education. Of special interest to maritime readers will be the chapters on transport, iron and steel, fuel and power, prime movers, navigation and telecommunications. The book forms a unique record, amply fulfilling its objective, and is illustrated by many half-tone plates. An excellent index is provided to the 346 pages in this volume.

# SHIPPING SUPPLY AND DEMAND

## ARE THERE ENOUGH DRY-CARGO SHIPS FOR WORLD TRADE?

**By PETER DUFF**

THE STEEP RISE in tramp freight rates during the last two months has drawn attention to the problem of the supply of and demand for dry-cargo vessels. The freight index published by the Chamber of Shipping rose from 97.6 in November to 115.7 for December last (the base of 100 being the average for 1948), and the prospects are that the index will continue its upward trend for January, 1951. That this index should have risen so rapidly from a prolonged depression in the 60's and low 70's last spring and early summer, when the supply of and demand for tramp ships were almost in equilibrium, indicates the high inelasticity of the dry-cargo tonnage position. This is a situation which is quite different from that prevailing before the war, and it raises the question as to whether or not, in the changed postwar conditions of the world, there is sufficient dry-cargo tonnage afloat to satisfy the long-term demands of ocean transport.

Despite the enormous losses of shipping during the Second World War, there is much more merchant tonnage afloat in the world today than there was in 1939, even if the reserve fleet laid up in the United States is excluded, but the balance of the composition of the world fleet has undergone a marked change. As will be seen from Table I, there is a marked increase in the proportion of tankers, but the tonnage of dry-cargo

**TABLE I.—MERCHANT SHIPS OF 100 TONS GROSS AND OVER**
*(Tonnage in thousands)*

| Type | 1939 Tons gross | 1950 Tons gross |
|---|---|---|
| Tankers (1,000 t.g. and over) | 11,437 | 16,866 |
| Fishing vessels | 1,066 | 1,156 |
| Great Lakes | 2,404 | 2,962 |
| U.S. laid-up reserve fleet | — | 14,000 |
| Non-tankers remaining | 53,602 | 49,599 |
| Total | 68,509 | 84,583 |

*Source*: Lloyd's Register of Shipping.

carriers available for ocean service has diminished. Lloyd's Register of Shipping publishes statistics covering merchant ships of 100 tons gross and above under all flags, and if tankers are excluded, as well as Great Lakes shipping and the U.S. laid-up fleet, it will be seen that the residue on June 30, 1950, amounted to about 49,600,000 tons gross, or more than 4,000,000 tons less than in 1939. This figure, it must be noticed, includes all non-tankers of 100 tons gross and over, including passenger and refrigerated cargo vessels, coasters and specialised vessels of every kind. If we are to arrive at a more reasonable estimate of the vessels which are available for the sea transportation of bulk cargoes, we must exclude vessels which are not suitable for this purpose, such as passenger liners and other specialised vessels. The nearest approach we can get to this figure is given in Table II, which is derived from statistics published by the American Bureau of Shipping. Whereas Lloyd's Register includes all vessels of 100 tons gross and above, the American Bureau excludes all vessels of less than 1,000 tons gross, as well as special types such as Great Lakes and inland waterways craft, cross-channel ships, icebreakers, cable ships and the like. The figures in Table II, therefore, reduce the maximum tonnage of dry-cargo vessels available to some 48,834,000 tons gross. From this must be subtracted, again, the 14,000,000 or so tons of the American laid-up fleet, and it is reasonable to deduct as well at least 1,250,000 tons of shipping under the Soviet Russian flag which is not available for international trading.

### A Changed Situation

From these statistics it is reasonable to deduce that the carrying capacity of the world's dry-cargo fleet is now considerably lower than it was in 1939, even without taking into account the increased time occupied by delays in turnround in port. During the early months of 1950, however, it began to seem that, with the arrival of replacements which had been built since the end of the war and with the completion of the arrears of survey and maintenance work, the tramp section of the fleet, at any rate, had just about reached the capacity which the quantum of world trade demanded. There was already serious talk of laying up ships again when the Korean campaign started in June. Since then more and more demands have been made on the available shipping and an acute shortage of tonnage has developed, as the steep rise in freight rates testifies. The steeper the rise, however, the steeper the fall is likely to be when it comes. The question of the moment is how long this period of high freights will last, and a closer analysis of the factors which produced this condition may well throw some light on this question.

An excellent account of these developments was given by "Baltrader" in the Annual Review number of THE SHIPPING WORLD (January 10). The outbreak of war in Korea, as he showed, did not have a direct or immediate effect on freight rates. Many ships wanted to carry military supplies were withdrawn from the United States laid-up reserve fleet, but other American ships were taken from American waters, so that rates rose in that area. Meanwhile, it became apparent that routine charterers had been holding back from covering their commitments in the hope that the downward trend of rates in the early summer would continue. Korea put a stop to that possibility, and they came into the market. This alarmed the North Pacific lumber charterers, who offered greatly enhanced rates to attract tonnage from other trades. Thus the general rise in freights spread to other markets; and by this time the worldwide strategic hoarding of raw materials had started on a big scale, to be followed closely by the requirements of rearmament programmes.

### Tonnage for Grain and Coal Imports

This was the state of affairs when British Government charterers came into the market for tonnage to import grain from the Black Sea, but they still showed no inclination to concede the higher rates then prevailing in almost every market. Far from easing, the demand for tramp tonnage immediately soared when the decision came to import over 1,000,000 tons of coal from the United States, at a time when other European coal-consumers were compelled to do the same owing

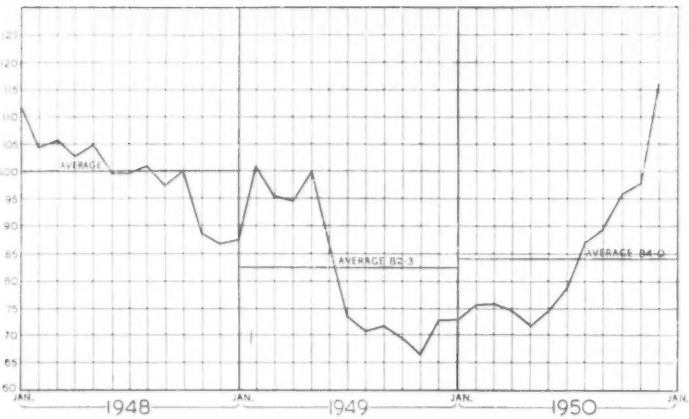
**TABLE II.—MERCHANT SHIPS OF 1,000 TONS GROSS AND OVER**
Excluding specialised and Government-owned vessels
*(Tonnage in thousands)*

| Type | June 30, 1950 No. | Tons gross | Tons d.w. |
|---|---|---|---|
| Passenger and cargo | 1,105 | 8,148 | 6,614 |
| Refrigerated | 253 | 1,536 | 1,736 |
| Tankers | 2,071 | 16,481 | 25,261 |
| Dry-cargo | 9,621 | 48,834 | 71,688 |
| Total | 13,050 | 74,999 | 105,299 |

*Source*: American Bureau of Shipping.

to the lack of British coal exports. An absolute world shortage of tonnage had been created, but the heavy commitments of the British Government bulk buyers of timber and grain, in particular, continued, and there was no alternative for them but to offer higher rates than had prevailed since the winter of 1947-48, even despite the voluntary assistance of the liner companies in withdrawing from the time charter market.

Meanwhile other factors were at work in increasing the demand for tonnage and reducing the carrying power of the tonnage which was available. British industrial production, for instance, was steadily increasing and requiring higher imports of raw materials. Steel production, for example, reached the highest




**Chamber of Shipping index of tramp freight rates, calculated on fixtures in sterling each month for the years 1948-50, the average for 1948 being 100**

level in history, but even so the industry's anticipated imports of iron ore fell short by 600,000 tons because shipping was not available to transport it. British exports of motor cars and other manufactured goods, too, reached unprecedented levels, with the result that the liner companies did not have enough tonnage to cope with the outward cargoes and had to time charter extra tramp ships. The normal tramp ship, however, is designed principally for the carriage of bulk cargoes only, coal outwards and grain homewards being the prewar model fixture; and more ships of this type are required for manufactured exports than ships of the liner type would be, which are designed for liner cargoes in both directions.

Finally, there are two more factors, different in character from those outlined above, which have helped freight rates on their upward climb. The first is the abnormal nature of some of the voyages which are now being performed. For example, owing to the quarrel between India and Pakistan, India is importing vaster quantities of grain than ever before from the Plate and North America instead of from her neighbour; and it is scarcely necessary to instance again the importation of coal from North America and South Africa to Europe. The resumption of one prewar trade also had the effect of introducing a longer haul than before—soya beans from Manchuria to Europe. These longer hauls naturally occupy ships for longer periods and reduce their carrying capacity in terms of tons per year, an effect which is further strengthened by the delays which are incurred in so many ports at home and overseas.

### Increases in Operating Costs

The incidence of unnecessary delays in port brings us to the second factor, the rises in operating costs. Losses incurred through delays in port add to expenses as well as reducing carrying capacity. These expenses have been increasing, and have to be added to the considerable increases which have occurred during the year in fuel costs, both oil and coal. Wages have also increased under some flags and further rises have been the subject of agreement by the National Maritime Board. These increases in operating costs are bound to be reflected in freight rates, and must account for at least a proportion of the current upward trend.

If these are the principal factors which have caused the tramp freight market to boom, how long are they likely to exercise their influence? Is there, in fact, a permanent deficiency of ships of tramp type for the requirements of world trade in postwar conditions? It is impossible to find a short answer, but there is no doubt that such a steep rise in freight rates, to which many factors have contributed, may respond sharply to a reversal of many or all of these influences.

Undoubtedly the greatest single influence on the reduction of pressure on tonnage would be the cessation of hostilities in the Far East, principally because it would ease the international tension and put an end to the frantic scramble for strategic materials which is putting such a strain on sea transport facilities. But if some of the materials which are carried by ocean transport are being shipped on a colossal scale, it is only at the expense of other materials which would have been shipped in the normal way of trade; and the concentration on materials which are considered most urgent at the moment, together with their abnormal distribution, has created shortages of other materials in most places and of those materials in some places. More than half a million tons of iron ore imports to the United Kingdom have been sacrificed, and the rate of British exports reduced, to provide the tonnage to import American coal; and many commodities are not being shipped at all at the moment. If the demand for tonnage which is attributed to "stockpiling," Korea and rearmament, were to cease overnight, a long time would elapse before the overall demand for tonnage would show any signs of relief, unless other factors were brought into play which would also have the effect of increasing the availability of ships.

(*To be continued*)

## RECENT PUBLICATIONS

The current issue of *Thames*, a magazine devoted to boating and other activities on the River Thames, is the first since it was converted from a monthly into a quarterly.

A SURVEY of economic and commercial conditions in Southern and Northern Rhodesia and Nyasaland has been published by H.M. Stationery Office, price 2s. 6d.

A new format and size has been adopted for the *Fortnightly Review*, prepared by the Bank of London & South America, Ltd. The contents are based on reports received from branch managers and designed to cover the main aspects of business and economic conditions in countries where the bank is established.

The *P.L.A. Monthly* for January states that the Port of London Authority, by permission of the South Eastern Gas Board, has erected on the wharf at Blackwall Point a notice-board marking the place at which the Meridian of Greenwich cuts across the right bank of the Thames. This is the first time that there has been any physical indication of the meridian visible to ships passing up and down the river. "The longitude of the Port of London is shown in reference books as being 0°0.5′ W, which is at London Bridge, but an examination of a map of the port will show that half the dock quays lie in the Eastern Hemisphere, and half in the Western Hemisphere." It was not until 1881 that official recognition was granted by the Washington Meridian Conference to Greenwich.

# MERCHANT FLEETS OF THE WORLD

## STATISTICAL NOTES ON THE 1950-51 EDITION OF LLOYD'S REGISTER

THE 1951 edition of the Appendix to Lloyd's Register Book is now being issued to subscribers. This volume again contains listed information of great value to the shipping community, including statistical tables based on entries in Lloyd's Register Book at July, 1950. The following table shows the gross tonnage (in thousands) of the merchant fleets of the principal maritime countries at that date, and the increase or decrease over the figures for the previous year. The largest increases are shown for Norway, Panama and Japan. The decrease in Canadian tonnage is due to transfer of ships to U.K. register.

**Principal Merchant Fleets of the World**
(thousand tons gross)

| Country | As in July, 1950 | Increase or Decrease over 1949 |
|---|---|---|
| Great Britain and N. Ireland | 18,219 | (−126) |
| Canada | 1,931 | (−166) |
| Total British Commonwealth | 22,118 | (−68) |
| *U.S.A. | 27,513 | (−300) |
| Norway | 5,456 | (+539) |
| Panama | 3,361 | (+345) |
| France | 3,207 | (+136) |
| Holland | 3,109 | (+118) |
| Italy | 2,580 | (+138) |
| Russia | 2,125 | (−7) |
| Sweden | 2,048 | (—) |
| Japan | 1,871 | (+307) |
| Greece | 1,349 | (+20) |
| Denmark | 1,269 | (+99) |
| Spain | 1,190 | (+3) |
| Argentina | 914 | (+99) |
| WORLD TOTAL* | 84,583 | (+2,012) |

* Including U.S.A. Reserve Fleet estimated at 14 million tons gross in July, 1950 (12 million in July, 1949)

Compared with 1939 the largest increases are shown for: U.S.A. (+16,152,000 tons), Panama (+2,644,000 tons), Canada (+708,000 tons), Argentina (+623,000 tons) and Norway (+622,000 tons); while decreases are noted for Germany (−4,023,000 tons), Japan (−3,759,000 tons), Italy (−844,000 tons) and Greece (−432,000 tons).

Preponderance of the size group 6,000-8,000 tons still reflects the wartime building programme, which has now fallen back in age to the 5-10 year group, but a large proportion of this tonnage is not in commission. Of ships built since the war, the largest amount of tonnage falls in the size group 8,000-10,000 tons. A change is also indicated in the size pattern of world tonnage by an increase in numbers of ships between 10,000 and 20,000 tons, from 496 in 1939, to 950 in 1949, and to 1032 in 1950 of which 734 are oil tankers. On the other hand, there are now only 58 ships (39 in U.K.) of 20,000 tons and upwards, as compared with 82 (42 in U.K.) in 1939. If the U.S.A. reserve fleet be excluded, one-quarter of the world's effective tonnage is 25 years old or more.

### Propulsion and Fuel

As shown in the accompanying tables motorships represent only 25 per cent of the total steam and motor tonnage owned in the world, but analysis of the principal maritime countries shows wide variations. In Norway, motorships amount to 71 per cent of tonnage owned, in Sweden 68 per cent, Denmark 63 per cent, and Holland 50 per cent; whereas in Greece and U.S.A. they

**PROPULSION ANALYSIS OF WORLD TONNAGE**

| COUNTRIES | STEAMERS* Reciprocating Engines No. | Tons Gross | Turbine Engines No. | Tons Gross | MOTORSHIPS† No. | Tons Gross | AUXILIARIES Steam No. | Tons Gross | Motor No. | Tons Gross | TOTAL No. | Tons Gross |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| British Commonwealth— | | | | | | | | | | | | |
| Great Britain and N. Ireland | 4,060 | 8,151,726 | 403 | 3,809,840 | 1,570 | 6,253,915 | — | — | 27 | 3,766 | 6,060 | 18,219,247 |
| Australia | 266 | 381,846 | 5 | 32,091 | 57 | 120,703 | — | — | 21 | 3,773 | 349 | 538,413 |
| Canada | 608 | 1,558,578 | 20 | 164,624 | 383 | 187,079 | — | — | 145 | 21,192 | 1,156 | 1,931,473 |
| New Zealand | 72 | 99,701 | 4 | 20,587 | 76 | 78,236 | — | — | 12 | 2,181 | 164 | 200,705 |
| Other Commonwealth Countries | 582 | 884,701 | 24 | 149,624 | 308 | 185,961 | — | — | 47 | 7,879 | 961 | 1,228,165 |
| America (United States)— | | | | | | | | | | | | |
| Sea | 2,279 | 13,535,303 | 1,242 | 10,543,618 | 990 | 1,140,038 | — | — | 11 | 5,015 | 4,522 | 25,223,974 |
| Great Lakes | 386 | 2,107,314 | 16 | 131,408 | 29 | 50,689 | — | — | — | — | 431 | 2,289,411 |
| Argentina | 194 | 310,140 | 35 | 267,065 | 136 | 335,531 | 1 | 146 | 3 | 635 | 369 | 913,517 |
| Belgium | 89 | 132,664 | 15 | 102,288 | 117 | 245,934 | — | — | 1 | 770 | 222 | 481,656 |
| Brazil | 223 | 395,570 | 31 | 163,547 | 66 | 132,484 | — | — | 8 | 6,559 | 328 | 698,160 |
| Denmark | 295 | 421,743 | 10 | 44,209 | 294 | 783,177 | — | — | 119 | 19,882 | 718 | 1,269,011 |
| France | 634 | 1,462,722 | 82 | 711,846 | 495 | 1,026,119 | — | — | 23 | 5,817 | 1,234 | 3,206,504 |
| Germany | 486 | 302,175 | 1 | 4,417 | 343 | 109,026 | 4 | 626 | 272 | 43,286 | 1,106 | 459,530 |
| Greece | 289 | 1,185,352 | 13 | 118,445 | 42 | 38,658 | — | — | 42 | 6,419 | 386 | 1,348,874 |
| Holland | 351 | 857,344 | 82 | 695,944 | 1,014 | 1,543,956 | 1 | 163 | 82 | 11,167 | 1,530 | 3,108,574 |
| Italy | 427 | 1,576,374 | 45 | 395,591 | 354 | 563,436 | — | — | 233 | 44,991 | 1,059 | 2,580,392 |
| Japan | 684 | 721,434 | 159 | 795,242 | 654 | 351,707 | 1 | 2,777 | 1 | 116 | 1,499 | 1,871,276 |
| Norway | 868 | 1,382,474 | 21 | 205,768 | 1,257 | 3,857,104 | 2 | 267 | 54 | 10,091 | 2,202 | 5,455,704 |
| Panama | 344 | 1,521,632 | 138 | 1,411,012 | 88 | 428,122 | — | — | 3 | 573 | 573 | 3,361,339 |
| Russia (U.S.S.R.) | 748 | 1,555,402 | 25 | 135,224 | 184 | 428,284 | 1 | 493 | 9 | 5,420 | 967 | 2,124,823 |
| Spain | 720 | 754,604 | 11 | 82,981 | 308 | 332,603 | 11 | 1,496 | 95 | 17,988 | 1,145 | 1,189,672 |
| Sweden | 596 | 631,376 | 6 | 15,988 | 432 | 1,359,015 | — | — | 237 | 41,654 | 1,271 | 2,048,033 |
| Other Countries or Country not stated | 1,553 | 2,835,519 | 90 | 769,652 | 819 | 1,191,640 | 1 | 209 | 137 | 37,682 | 2,600 | 4,834,702 |
| Total | 16,754 | 42,765,694 | 2,478 | 20,771,011 | 10,016 | 20,743,417 | 22 | 6,177 | 1,582 | 296,856 | 30,852 | 84,583,155 |

* The figures for reciprocating engines include 469 ships, of 1,747,875 tons, fitted with a combination of reciprocating and turbine engines; and the figures for turbines include 507 ships, of 5,213,674 tons, fitted with turbo-electric drive.
† These figures include 167 ships, of 194,677 tons, fitted with diesel-electric drive.

**OIL TANKERS—TRAWLERS—STEAMERS FITTED FOR OIL FUEL**

| COUNTRIES | OIL TANKERS (of 1,000 tons and upwards) Steamers No. | Tons Gross | Motorships No. | Tons Gross | Total No. | Tons Gross | STEAM AND MOTOR TRAWLERS AND FISHING VESSELS No. | Tons Gross | STEAMERS FITTED FOR BURNING OIL FUEL* No. | Tons Gross |
|---|---|---|---|---|---|---|---|---|---|---|
| Great Britain and N. Ireland | 213 | 1,612,532 | 279 | 2,190,016 | 492 | 3,802,548 | 1,147 | 328,874 | 4,503 | 7,937,875 |
| Canada | 36 | 172,534 | 17 | 33,813 | 53 | 206,347 | 132 | 22,053 | 238 | 991,098 |
| Other British Commonwealth Countries | 9 | 28,853 | 5 | 9,494 | 14 | 38,347 | 81 | 21,362 | 280 | 744,766 |
| America (United States) | 439 | 4,191,611 | 78 | 342,841 | 517 | 4,534,452 | 244 | 60,758 | 3,245 | 23,631,373 |
| Argentina | 19 | 125,310 | 16 | 108,677 | 35 | 233,987 | 12 | 2,766 | 128 | 508,529 |
| Belgium | 1 | 10,365 | 7 | 56,016 | 8 | 66,381 | 77 | 16,968 | 44 | 178,066 |
| Denmark | 4 | 20,397 | 18 | 164,697 | 22 | 185,094 | 79 | 20,246 | 76 | 214,263 |
| France | 35 | 294,876 | 36 | 277,957 | 71 | 572,833 | 375 | 130,971 | 317 | 1,644,404 |
| Germany | 1 | 8,670 | 1 | 1,172 | 2 | 9,842 | 362 | 99,507 | 14 | 28,788 |
| Greece | 12 | 91,760 | 1 | 10,694 | 13 | 102,454 | 5 | 945 | 161 | 989,283 |
| Holland | 51 | 218,953 | 52 | 333,695 | 103 | 552,648 | 289 | 51,702 | 231 | 1,299,608 |
| Honduras | 13 | 162,238 | — | — | 13 | 162,238 | 1 | 249 | 66 | 426,809 |
| Italy | 49 | 376,109 | 23 | 146,136 | 72 | 522,245 | 31 | 10,982 | 254 | 1,566,185 |
| Japan | 32 | 203,517 | 6 | 40,614 | 38 | 244,131 | 296 | 57,077 | 74 | 391,485 |
| Liberia | 14 | 229,555 | — | — | 14 | 229,555 | — | — | 16 | 233,243 |
| Norway | 45 | 390,668 | 230 | 2,096,363 | 275 | 2,487,031 | 247 | 44,040 | 399 | 1,190,001 |
| Panama | 150 | 1,447,685 | 40 | 291,865 | 190 | 1,739,550 | 3 | 1,364 | 367 | 2,617,383 |
| Russia (U.S.S.R.) | 8 | 34,504 | 24 | 105,095 | 32 | 139,599 | 128 | 67,093 | 138 | 713,048 |
| Spain | 9 | 35,906 | 16 | 112,044 | 25 | 147,950 | 540 | 104,745 | 119 | 213,297 |
| Sweden | 1 | 7,363 | 43 | 343,478 | 44 | 350,841 | 27 | 5,192 | 65 | 156,655 |
| Venezuela | 27 | 81,925 | 10 | 30,606 | 37 | 112,531 | — | — | 36 | 89,450 |
| Other Countries | 39 | 240,133 | 49 | 185,157 | 88 | 425,290 | 263 | 109,231 | 471 | 1,537,786 |
| Totals | 1,207 | 9,985,464 | 951 | 6,880,430 | 2,158 | 16,865,894 | 4,339 | 1,156,125 | 8,242 | 47,303,395 |

* Included in these figures are 2,267 ships of 19,808,954 tons, with steam turbine engines.

represent only 3 per cent and 4 per cent respectively. The figure for Great Britain and Northern Ireland is 34 per cent. Taking into account also the burning of oil fuel in steamers, however, there is a much more general employment of oil, which is used as fuel in 81 per cent of the total steam and motor tonnage. The 19 per cent which now depends on coal compares with 45 per cent in 1939, and with 97 per cent in 1914.

Excluding ships of less than 1,000 tons gross, oil tankers owned in the world have increased by 1,042,000 tons since 1949 and now amount to 16,866,000 tons gross, representing 21.3 per cent of all steamers and motorships as compared with 20.4 per cent a year ago. Figures for 1939 were 11,437,000 tons (18.0 per cent). Of the tankers now afloat 4,534,000 tons are registered in U.S.A.; 3,803,000 tons in Great Britain and Northern Ireland; 2,487,000 tons in Norway; and 1,740,000 tons in Panama.

At the end of June, 1950, the number of merchant ships entered in the Register Book to the Society's classification totalled 9,595 and their aggregate tonnage (34,502,000 tons gross) represented almost half the effective world total at that date.

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AT THE end of 1950 the combined fleet of the Broström group, Gothenburg, numbered 75 vessels, totalling 449,683 tons d.w. In addition, 18 ships, of 143,100 tons, are on order or building, nine of which are expected to be delivered in 1951. All the cargo liners of the group are now motorships, only two steamships being left in the fleet.

CAPT. DAVID R. HULL, U.S.N. (Retd.), has been elected a vice-president of the Raytheon Manufacturing Company, Massachusetts, U.S.A. Captain Hull, previously assistant manager of the equipment divisions of the company, has been appointed manager. He replaces Wallace L. Gifford, who is continuing as a director and vice-president.

## Radio Communications and Electronic Engineering Association

At the annual general meeting of the Radio Communications & Electronic Engineering Association on January 19, Mr. V. M. Roberts, of the British Thomson-Houston Co., Ltd., the retiring chairman, said that members were fully engaged in connection with developments and production for the rearmament programme. Despite this they had been able to make a substantial contribution to civilian needs, and the marine section up to the end of 1950 had equipped 1,200 merchant ships of various countries with British commercial radar and were fitting ships at the rate of 40 a month. Mr. L. H. J. Phillips, manager of the radio sales department of Metropolitan-Vickers Electrical Co., Ltd., was elected chairman for the ensuing year and Mr. K. S. Davies, of Murphy Radio, Ltd., was elected vice-chairman.

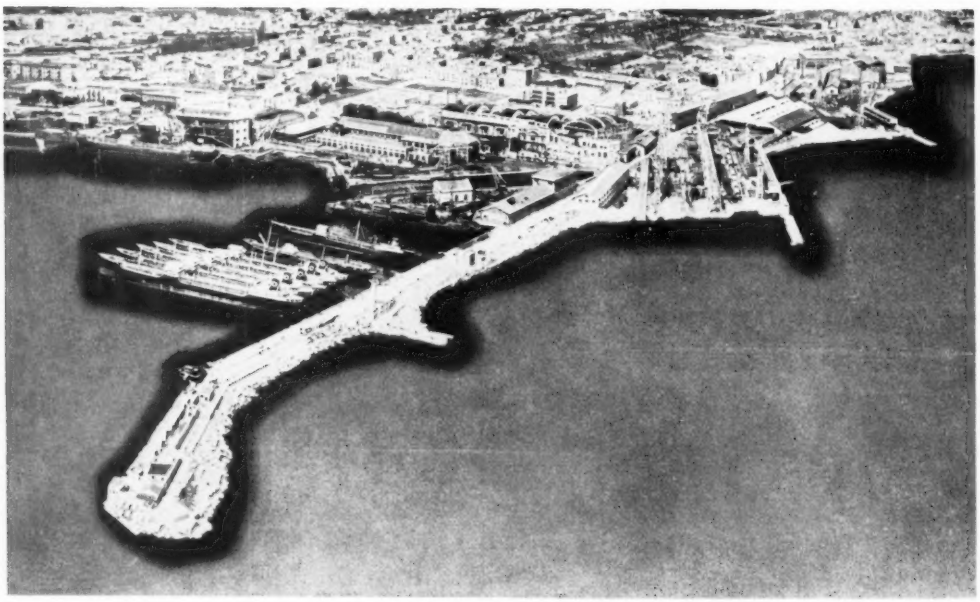
## NEXT WEEK'S EVENTS

FEBRUARY 9.—"The Electrification of Shipyards," by J. S. McCulloch. N.E. Coast Institute of Engineers & Shipbuilders, Mining Institute, Newcastle-upon-Tyne. 6.15 p.m.

FEBRUARY 13.—"Corrosion-Resistant Materials," by L. W. Johnson and E. J. Bradbury. Institute of Marine Engineers, 85 Minories, London, E.C.3. 5.30 p.m.

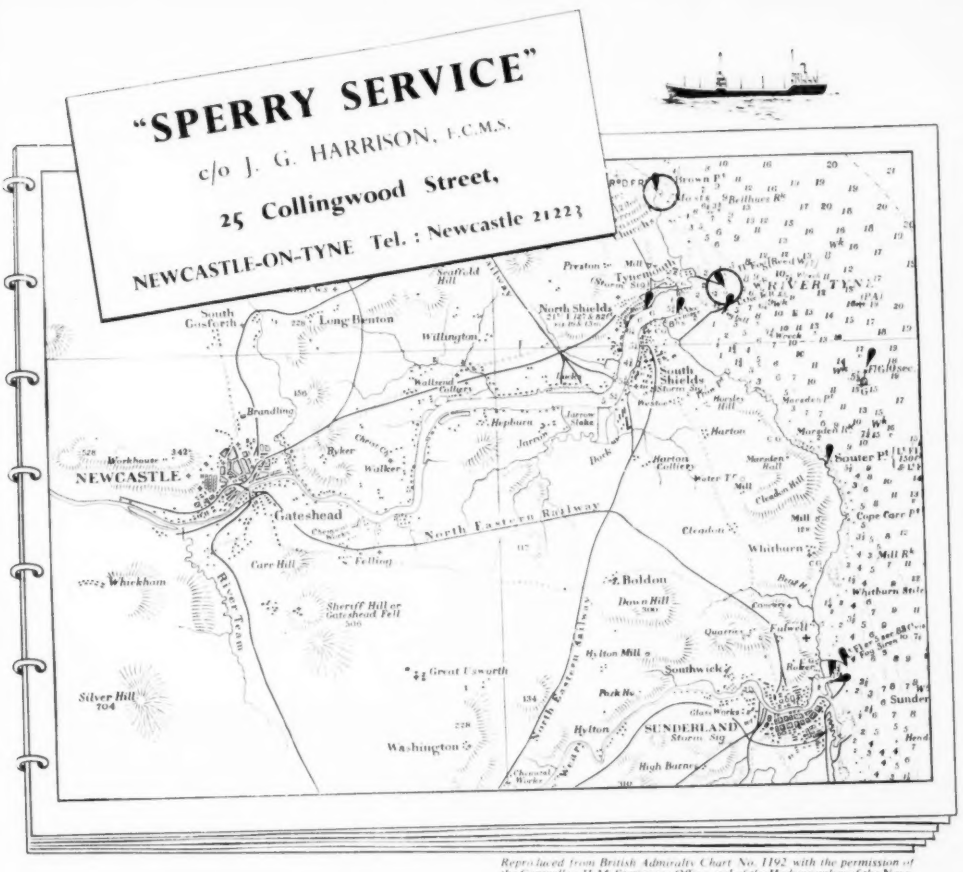
FEBRUARY 13.—"The Inductor Compass," by A. Hine. Institution of Electrical Engineers, Savoy Place, London, W.C.2. 5.30 p.m.

FEBRUARY 14.—"Thirty Years' Development of Opposed Piston Propelling Machinery," by W. H. Purdie. Thomas Lowe Gray lecture to the Liverpool Engineering Society, 24 Dale Street, Liverpool. 6.0 p.m.



**Tanker Repairs at Palermo**

This aerial view shows the Palermo shipbuilding yard of the Cantieri Navali Riuniti, where many of the tankers passing through the Mediterranean undergo repairs. An average of eighteen ships a month has been handled by this yard during the course of recent months. With a view to securing some of the additional tanker repair work which will be incurred in the area with the opening of the Trans-Arabian Pipeline, the yard is constructing a new dry dock capable of handling vessels of 30,000 tons d.w. There is also to be built at Palermo a new shop for the prefabrication of ships' double bottoms, plating and other sections to speed up the repair work. Palermo is favourably situated for tanker repairing, as vessels steaming between Gibraltar and the Levant are not required to lengthen their journeys. Shiprepairing costs are also a favourable feature at Palermo. An example of the costs is given by the fact that drydock dues (24 hours), cleaning and painting (owners' paint), tugs in and out, mooring and unmooring, gas-free certificate, pilotage and agency fee for a T2 tanker at Palermo does not cost more than £1,650




*Reproduced from British Admiralty Chart No. 1192 with the permission of the Controller, H.M. Stationery Office, and of the Hydrographer of the Navy.*

To the Tyne port of Newcastle come the Scandinavian cargo boats loaded with newsprint from Norway, iron ore from Sweden and timber from the Baltic. Past the trawler fleets of North and South Shields they thread their way ; past dusty colliers outward bound ; past tankers discharging at Jarrow Oil Quay ; past the shipyards of Howden, Jarrow and Wallsend they go to tie up at the centuries-old Quayside where traffic still rumbles over cobbled streets in the shadow of the five bridges.

And there, as you would expect in a port famous since the first days of "sea-coal" the local facilities include full service for all types of Sperry marine navigational equipment.

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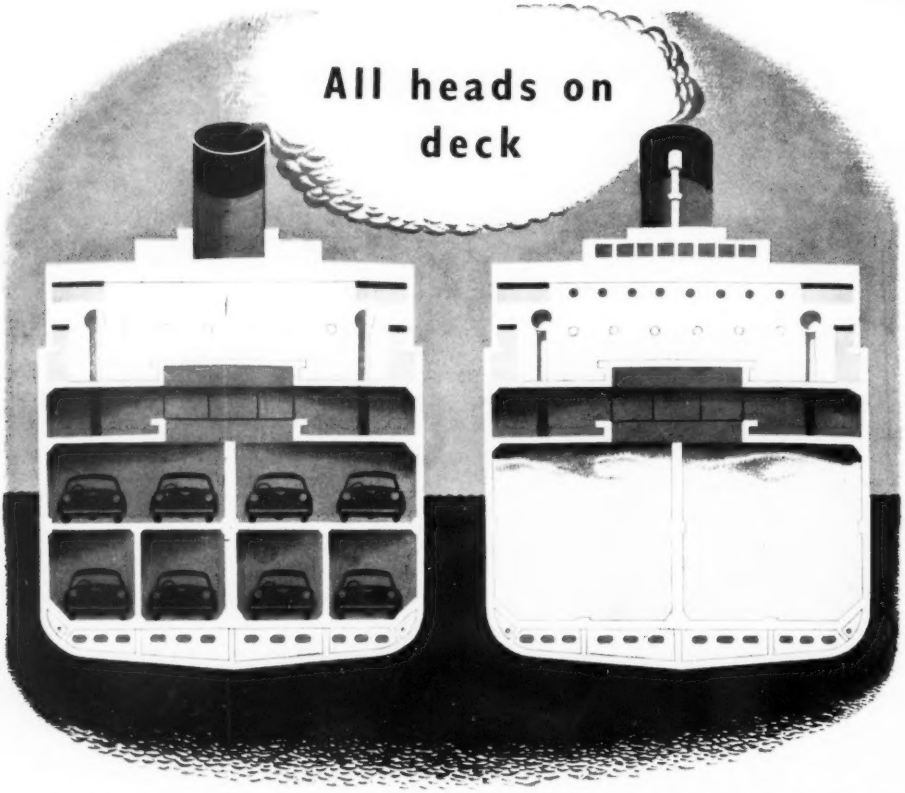


T.I. Aluminium have put their heads together with the shipping world to see what can be done for Britain's cargo vessels. The problem, roughly, is that if you export cars, for instance and import wheat, the ship's hold can't be ideally designed for both of them . . . Unless, perhaps, you can do something by way of a false deck — a retractable 'mezzo-deck' with a drawbridge action — a light, strong structure in Aluminium Alloy. *Can* it be done? T.I. Aluminium are helping to find out: we mean what we say when we talk of 'research' and 'development work'.

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# ALUMINIUM IN SHIPS

## A CRITICAL SURVEY AND NOTE OF CAUTION

**By a Shipyard Naval Architect**

THE SHIPPING WORLD has a well-defined aluminium policy. We believe that the future of British and foreign shipbuilding lies along the lines of a continual increase in the application of light alloys to ships, in both local and major structural parts of the hull, as well as in main and auxiliary machinery and equipment. We believe that the saving in weight, and the new opportunities offered for improved ship designs which will follow from successful use of aluminium and its alloys, will eventually be of no less importance than the transition from wood to iron and, later, from iron to steel. At the same time, opportunities must be given to those who do not agree with this view to express their opinions, and we welcome the contribution to free discussion which one of the younger naval architects in shipbuilding has made in the accompanying article. Several of the points raised are capable of immediate answer, while in one or two instances the case against light alloys may be overstated. Nevertheless, THE SHIPPING WORLD will welcome other views, equally freely expressed, and will give similar opportunity to the protagonists of aluminium to answer the criticisms made

FOR SOME time now THE SHIPPING WORLD has pursued a firm "pro-aluminium" line, and undoubtedly the idea of aluminium as a shipbuilding material is gaining wider acceptance among shipping companies and shipbuilders. Indeed, were it not for the high cost of the metal it is likely that it would find some form of application in almost every type of vessel which is constructed today. There is little doubt but that these applications would be limited because of certain technical difficulties in using the material which have not yet been fully overcome, but let us accept for the moment that an economic case can be made for the use of aluminium to some extent in a wide variety of ships today, and let us assume that all the technical problems have been solved to make its use possible.

This country stands or falls by its maritime policy and the quality of its merchant fleet, although this obvious fact seldom seems apparent to our politicians, and any basic change in ship design affecting these two paramount factors requires very careful consideration. A fairly widespread use of aluminium at this stage could, I consider, have a serious effect in wartime for the following reasons.

Aluminium is mainly a dollar product, the greater part of our supplies, I understand, being imported from Canada. There will obviously be a difficult supply position during a war, as other demands will have priority (e.g., the R.A.F.), but the most difficult position, I submit, will arise in repairs. Those of your readers with experience in wartime repairs will recall the high incidence of superstructure damage due in the main to air attack, and no one can doubt that this form of attack would most likely be intensified in any future conflict. Furthermore, as we are reasonably certain of the identity of our possible antagonists it can most certainly be assumed that it would be a global war in the fullest sense with our maritime resources stretched to their limit all over the world.

Repair facilities would be more vital than ever before and the supply position for aluminium, coupled with any inherent difficulty in working the material, might well cause difficulties and delays quite out of proportion to the amount of aluminium in the structure. I have referred only to the merchant fleet, but the question also arises in connection with naval vessels, as Press reports indicate that aluminium is being used to some extent in H.M. ships. How far this policy goes I do not know, but we must assume that repair problems in far distant and possibly even recently hostile ports must have received attention by our naval strategists.

It may seem to many that I have overstressed the strategic implications of the use of aluminium in ships, but I make no apologies, as I feel that any subject affecting in the slightest degree our maritime policy merits full ventilation and discussion. If there is a satisfactory answer to the above there are still, I contend, several reasons why aluminium is not a wholly satisfactory material and can never be until the following problems have been solved.

### Welding

Will it ever be possible to weld aluminium alloys with anything like the ease with which mild steel can be welded, and is it likely that weld efficiencies approaching those obtained in mild steel can be attained with alloys? As a youth in a shipyard I often used to wonder what the shipbuilder must have done before welding came in, and this at a time when its practice was by no means widespread.

When light alloys came along for ships I discovered the answer to that one—it all had to be done the hard way, and every small fitting of lug previously tack welded now required drilling and riveting. The problem of watertightness is more serious, as a small amount of welding (e.g., for plate collars, boundary bar corners, etc.) can be of great help in what is nominally an all-riveted vessel, but with light alloys this is generally not practicable owing to the danger of corrosive fluxes in the electric arc welding process; and with the Argonare welding process, apart from its high cost and unsuitability for outdoor work, it cannot readily be used for vertical and overhead welding. Then, of course, there is the fact that many yards are concentrating more and more on welding and are laying out their premises accordingly and consequently consider it a retrograde step to have to revert to riveting. Finally, with such expensive material the theoretical weight saving as between welded steel and welded alloy appears to be considerable. This surely means that until welding in shipyards is practicable aluminium cannot be used to its full advantage.

### Riveting

It is particularly unfortunate that whereas welding is a most difficult problem, the position is made worse due to the fact that the riveting of aluminium alloys presents considerable difficulties where the large sizes of rivet are concerned. The largest size which can be pneumatically driven is only about 5/6-in. and some yards find even this size difficult. This is of some importance in the shipbuilding and shiprepairing industries, particularly in the latter, and it must be a great handicap not to be able to burn holes in plates and burn out rivets, as is done so easily with steel. I think it is true to say that flame cutting is not possible with aluminium, which is, of course, another mark against it. There is said to be quite considerable danger of electrolytic corrosion at these joints, and although some form of insert can be used at the joints the rivets, which will presumably be of steel, must pass through the aluminium plate and there must be a direct steel-aluminium contact. A further drawback is the length of time and number of operations necessary for plate preparation before painting. The sequence of cleaning, degreasing, etching and priming seems a lot when compared to the ease with which steel can be treated; and then, of course, the paints must be carefully chosen.

The number of different alloys in use, coupled with the fact that each one may have a dozen different names or code letters, must be particularly trying to the user. Is it not possible to specify one, or at the most two,

***Monthly Light Alloys Section***

"shipbuilding alloys" and then have names for them agreed by all aluminium companies and used by them in preference to their own trade names? Furthermore, if more than one alloy is necessary, it would be helpful to mark the material in some way so that different types of alloy can be easily identified.

Aluminium castings, particularly where this metal can be used instead of brass or bronze, would appear to be a particularly useful application and, furthermore, one in which an immediate first saving in cost could be made. Such examples are portlights, electric light fittings, casings for bridge instruments, stanchions within the magnetic radius, etc., and there are probably many more. The remarkable thing, however, would seem to be the small number of present applications of this type where it would appear that a cheaper and equally efficient article could be produced in aluminium. There are stories of aluminium windows almost "vanishing" after a few months at sea, but one would think that there must be some explanation for this, as aluminium alloys have shown themselves to be quite corrosion-resistant where they have been used in lifeboat construction, unless in its cast form aluminium is not so corrosion-resistant.

THE SHIPPING WORLD recently published abstracts from an American paper entitled "Stateroom Fire Test"* which did not show aluminium in too favourable a light; but at the same time you published a comment on the paper which admittedly made its conclusions seem much less devastating. Nevertheless, for passenger ships it would appear that its low melting point might be aluminium's greatest drawback, and it is not surprising to read that work is being carried out to find a solution to this problem. Indeed the wonder is that research work on this subject was not started very much sooner in view of its importance both to merchant and naval vessels.

In conclusion I must say that I am not "anti-aluminium" and I do recognise that it has certain definite advantages as a shipbuilding material. It may well displace wood entirely for boat construction, and is infinitely better than steel for this purpose. It is, however, a material which comes from overseas, and its rapid introduction into ships might well cause serious trouble in wartime. This is not likely to happen in view of its high cost, and various technical problems still requiring solution before general application is possible; but it is a point which should be given consideration by all interested parties.

* In the issues of December 6, 1950, and January 3, 1951.

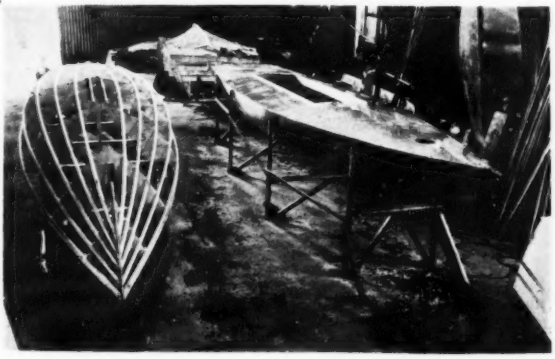
# THE "FLYING FIFTEEN"

## TRIALS OF THE FIRST OF THIS CLASS TO BE BUILT OF ALUMINIUM

Previous reference has been made in THE SHIPPING WORLD to the Uffa Fox-designed "Flying Fifteen" sailing yacht which was exhibited at the Motor Show last year. Now that the trials have taken place, it is possible to give further details of her design and construction. The trials were held on December 20 in a wind ranging between Force 4 and 5, and excellent sailing was obtained. The main point of interest in the boat is that she is the first of this well known class to be built entirely of aluminium alloy. She was built by Whittingham & Mitchel, Ltd., to Mr. Uffa Fox's designs, all material being supplied by the British Aluminium Co., Ltd. The following table gives the principal particulars of the "Flying Fifteen."

| | |
|---|---|
| Length overall | 20 ft. |
| Length on waterline | 15 ft. |
| Breadth | 6 ft. |
| Draught | 2 ft. 6 in. |
| Sail area | 150 sq. ft. |
| Weight of hull only | 320 lb. |
| Weight of keel | 380 lb. |
| Metal specification | B.A. 27 |
| Price, ex works (sails extra) | £350 |

The aluminium alloy used has a high corrosion resistance, while its freedom from attacks by the teredo worm or the white ant in tropical climates will be one of the principal attractions for foreign buyers. The hull plating is butt welded and all traces of welding flux were removed. The seams were thoroughly hammered up after welding, this operation automatically testing the welds, and work hardening the material as well as smoothing the surface. The iron keel is attached to the hull through substantial frames by means of stainless steel bolts. A high finish has been given to the hull, the metal being carefully cleaned mechanically and chemically and then etched, followed by two coats of zinc chromate primer and then undercoat. The finishing coat is an extremely durable synthetic enamel which can be provided in any colour or combination of colours to suit the owner's choice. Perhaps the two principal features which will appeal to buyers are the low upkeep costs owing to lack of rot or rust in the hull and the complete absence of soakage, thus giving a uniformly high standard of performance



**In its element at sea**

# DURALUMIN 'H'

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This particular alloy must not be confused with some others in the "Duralumin" range, which contain different alloying elements. These have their own special merits for certain applications, but may not be suitable where direct exposure to sea-water is involved. "Duralumin H" has been fully proved in use; it resists corrosion, is non-magnetic and discourages marine growths. Its use saves weight and power, and reduces maintenance costs. Our Development Department will gladly give full information entirely without obligation.

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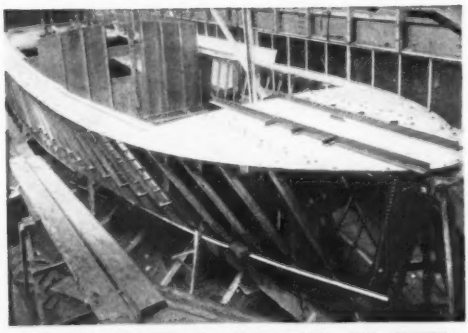
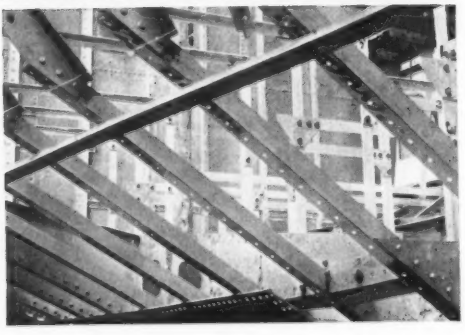
# "Kynal" Aluminium Alloys for Launches





Fast launches to carry up to twenty drillers were required by the Shell Caribbean Petroleum Company for service on Lake Maracaibo in Venezuela, frequently operating up to twenty five miles offshore.

To meet these requirements, 53-foot launches fitted with A.E.C. engines were designed by Mr. Gordon Lord for the Sussex Shipbuilding Company to attain a speed of not less than 18 knots.

One of these launches was built by Messrs. Groves and Guttridge Ltd. of Cowes and another by Messrs. Isaac Pimblott and Sons Ltd. of Northwich. In each instance I.C.I. aluminium alloy, 'Kynal' M.39 2, fully heat-treated, was used throughout for plating, structural members, rudders, rivets and sundry fitments.

A wide range of 'Kynal' aluminium alloys is fabricated in the form of sheet, strip, tube, extruded bars, rods and sections.

*Left: Two views of a launch on the stocks, showing details of the aluminium alloy construction.*

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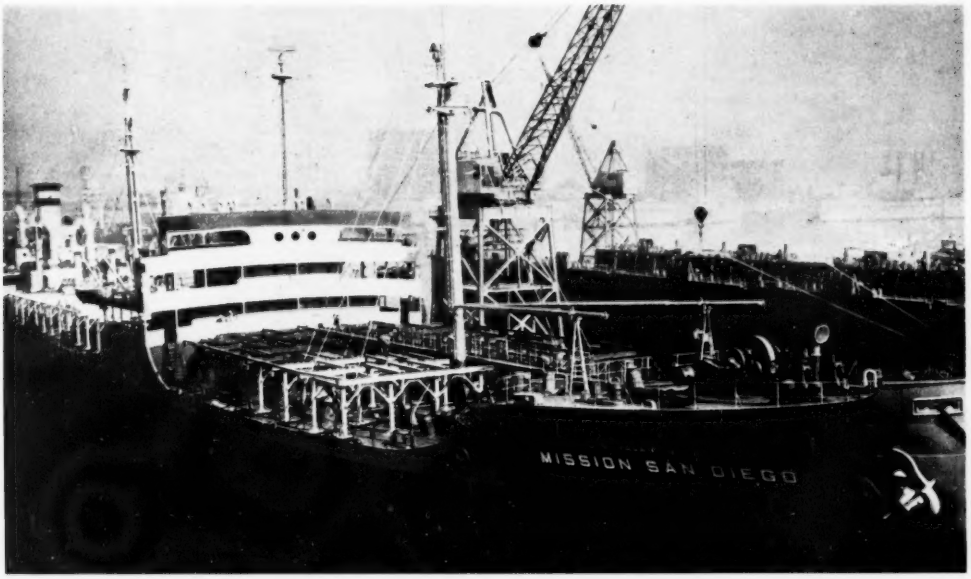



# AN ALUMINIUM AIRCRAFT DECK

## THE USE OF LIGHT ALLOYS TO GIVE A PORTABLE PLATFORM ON TANKERS

AN ALL-ALUMINIUM portable aircraft cargo deck has been erected on the U.S. Naval tanker *Mission San Diego*. The ship is under the jurisdiction of the United States Navy's Military Sea Transportation Service, Pacific, and is contract-operated on behalf of this department by the Pacific Tankers Division of Transportation, Inc. The work was done by the Todd Shipyards Corporation at its Alameda, California, yard. The new structure on this ship probably will be a forerunner of similar jobs on additional vessels of the same type. The portable structure is sometimes known as "Meccano decking" because erection is simple; many of the structure's segments are interchangeable, and can be dismantled, moved and reassembled easily and quickly, in a manner similar to that of a child's erector set. If necessary, two men alone could complete the entire operation, as no single part weighs more than 175 pounds.

### Only Permanent Feature

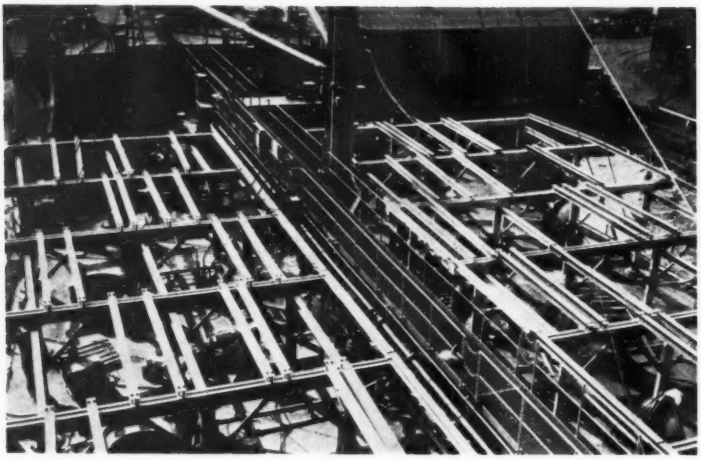
On the *Mission San Diego* the structure rests on 150 inverted cups on the main deck. These cups represent the only permanent feature of the decking, being fabricated of $\frac{3}{8}$-in. steel and welded to the main deck of the ship, and form the foundation for the upper portable structure of the aircraft cargo deck. All of the other principal parts of the structure are of prefabricated aluminium and are bolted to one another. Hollow stanchions are bolted to the inverted cups with insulating tape between the bases of the stanchions and the cups to prevent electrolysis. Brackets are welded to the stanchions and are joined to the upper structure by means of bolted knee braces. The upper structure forms a foundation for the movable longitudinal struts. The movable longitudinal support struts form the upper levels of the decking and may be moved along the deck beams by means of bolts channelled in Z-bars with their movement athwartships limited by the stationary longitudinal boundary struts. Each of the movable struts possesses a stationary and an adjustable wheel chock to accommodate wheels of the varied types of aircraft to be carried. There are 200 of these movable struts for the entire decking and all of them may be shifted to any section of the decking, depending upon cargo requirements. The movable struts along the uprights are pierced with numerous lashing pad eyes at regular intervals for use in securing the adjustable wheel chocks and the aircraft carried on the decking.

**The illustration above shows the U.S. naval tanker "Mission San Diego" with the aluminium portable deck under construction**

### 1,000 Bolted Segments

In all, the structure consists of approximately 1,000 bolted aluminium segments and less than 5,000 standard steel 1-in. and $\frac{7}{8}$-in. bolts and nuts. The structure is painted in accordance with measures currently in effect. Decking of the structure is level throughout. The ship's sheer, camber, and other characteristics in the vessel's deck plating are accommodated by modifications in the stanchion bases. The stanchion cups are varied in depth and the stanchions range from 8 ft. 9 in. to 7 ft. 9 in. in length to give a level platform. The structure consists of four sections, these being erected with two forward and two aft on the port and starboard sides. The port sections rest on three rows of stanchions, the starboard on four rows of stanchions, the lesser number of rows of stanchions to port being necessary to accommodate the fore-and-aft gangway. The port rows of stanchions are numbered 2, 3 and 4, inboard and outboard respectively, and the starboard rows are numbered 1, 2, 3 and 4, from inboard to outboard, and all similar parts of any particular numbered row are interchangeable.

Each of the four sections of the decking consists of a number of open bays. The bays are 12 ft. 2 in. fore-and-aft direction and 8 ft. 4 in. athwartships, excepting



**Erection work in progress on the all-aluminium portable aircraft cargo deck on the U.S. Navy's Pacific tanker "Mission San Diego" at Todd Shipyards Corporation plant at Alameda, California. At this point in the erection work the adjustable and stationary wheel chocks have not been installed on each of the movable longitudinal support struts**

that certain of the longitudinal struts have been eliminated from some bays to ensure flexibility of the decking when the ship is hogging or sagging, and in no instance are more than two of the bays tied together. Each of the forward sections is 85 ft. 2 in. in length. The two aft sections are both 146 ft. in length. Each of the two port sections has a basic width of 16 ft. 8 in. and, with an overhang of 2 ft. 6 in. inboard and outboard, total 21 ft. 8 in. in width. Each of the two starboard sections has a basic width of 25 ft., and with an overhang of 2 ft. 6 in. inboard and outboard, total 30 ft. in width. The entire decking provides approximately 12,000 sq. ft. of portable cargo space. The decking is so erected that its segments will not offer interference with use of the ship's normal equipment. The *Mission San Diego* is a standard T-2 type tanker, with an overall length of 523 ft., and a beam of 68 ft.

## Norway's Aluminium Output

A new plant to manufacture aluminium at the rate of 50,000 tons a year will be built at Sunndalsöra in West Norway, power being supplied by the Aura hydro-electric station. Production at first will be at the rate of 40,000 tons a year, but can later be increased to 50,000 tons. Production at this rate would double Norway's total aluminium production, which last year amounted to 45,000 tons. Total world production of aluminium in 1950, excluding the Soviet Union, is put at about 1,300,000 tons. In a survey published by the Norsk Aluminium Company, it is stated that there is an increasing use of aluminium for electric cables. More aluminium is also being used by the Norwegian canning and shipbuilding industries.

## Tube Investments Board

Tube Investments, Ltd., has announced that Mr. E. D. E. Andrewes, Mr. T. J. Boulstridge and Mr. P. Grove have been elected to the board. On the resignation of the secretary, Mr. A. B. I. Dick, to devote his whole energies as managing director of the TI subsidiary, Talbot Stead Tube Co., Ltd., Mr. I. Turner has been appointed secretary. Mr. E. D. E. Andrewes is managing director of TI (Export), Ltd.; Mr. T. J. Boulstridge is managing director of J. A. Phillips & Co., Ltd., and Mr. P. Grove is director of production, Steel Tubes Division, TI (Group Services), Ltd.

THE Council of the Institute of Metals has awarded the W. H. A. Robertson Medal to Mr. Christopher Smith, chief metallurgist to James Booth & Co., Ltd., for his paper on "The Extrusion of Aluminium Alloys."

## GERMAN ALUMINIUM PRODUCTION

### Home and Foreign Demands and Limited Supply

**By a Special Correspondent**

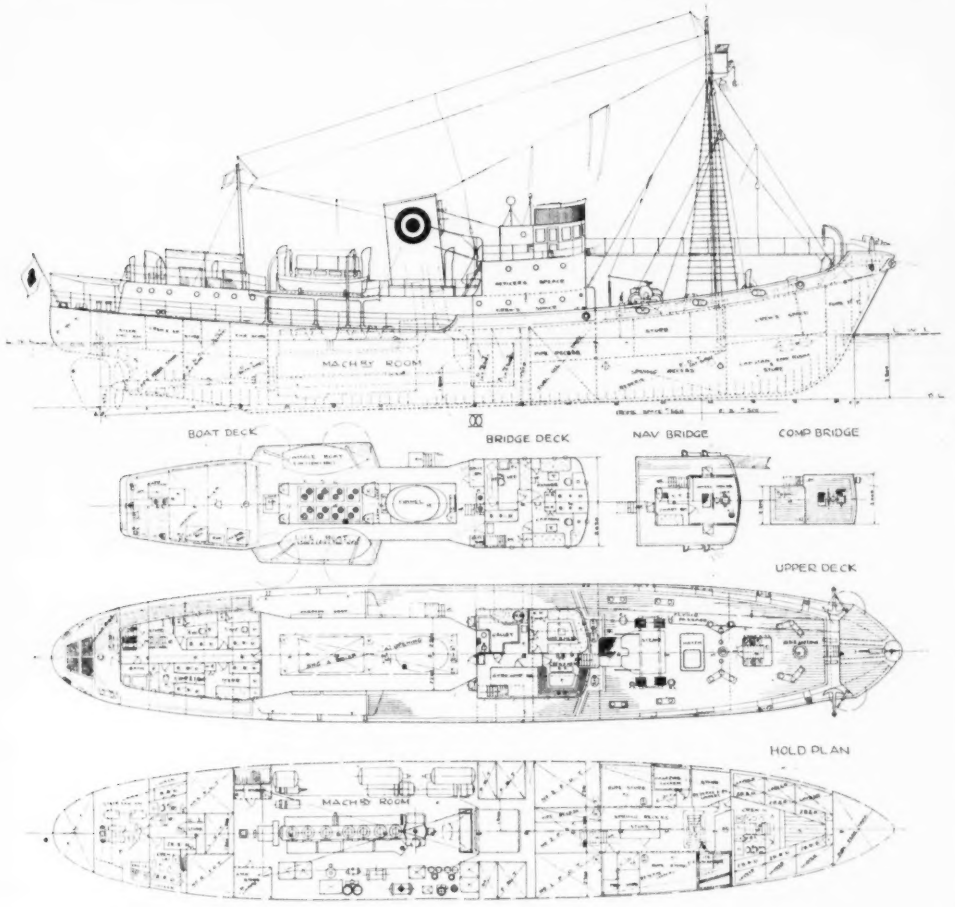
NEGOTIATIONS which have been going on for several months for the supply, by private contract between West German and American firms, of 100,000 tons of aluminium to the U.S.A., have been delayed indefinitely as present output is being seriously hampered by a shortage of electricity. Production of the three German plants at Toeging, Rheinfelden and Luenen, with a yearly capacity of 85,000 tons, is not sufficient to meet even domestic demand, according to German trade sources. The Luenen plant, which closed down in September, 1949, could not resume production on November 20 as planned, owing to the electricity shortage. Production at the Rheinfelden and Toeging plants is expected to decrease sharply for the same reason. Moreover, dismantling of furnace No. 3 at Toeging is being continued.

The 85,000 tons capacity will thus be only partly used, and considerable imports are regarded as indispensable by German experts. They also fear severe restrictions on the aluminium processing industries. Demand, on the other hand, has increased substantially, as aluminium is being used to an increasing extent in place of copper. According to unofficial German sources, imports of at least 8,000 tons of aluminium are required at present to cover domestic needs.

German metal experts report that the demand for aluminium in Western Germany amounts to 7,000 tons a month, that is 84,000 tons a year. The present capacity, however, does not exceed 60,000 tons, for it is reported that the Allied High Commission intends to lay idle the aluminium plant at Toeging and to go on dismantling the furnaces. The Lippe-Werk at Luenen is to begin production. The annual capacity is estimated at 30,000 to 35,000 metric tons, although for the time being output is not higher than 1,000 tons a month. American consumers and merchants propose to buy aluminium in Western Germany. Contracts are being concluded for the delivery of 120,000 tons of bauxite from Greece against an export of 38,000 tons of aluminium to the United States. In view of the increased German demand exports of aluminium and aluminium alloys, amounting to between 4,000 and 5,000 tons a month during the first half of 1950, were reduced to 1,000 tons in September and still less in October.

The Vereinigte Aluminium Werke reduction plant at Luenen has now resumed operations, after a delay due to an electricity shortage. The management has stated, however, that the electricity supply position is still not completely satisfactory and that monthly production will be 600 metric tons, and not 1,000 tons as originally decided.

SHIPS' furniture will be among the exhibits of over 300 manufacturers who are exhibiting in the second postwar Furniture and Allied Trades' Exhibition to be held at Earls Court, London, from February 13 to 23.




# Japanese Whalecatchers

## Development Aided by Home Market

THE JAPANESE have engaged in whaling now for a considerable number of years, and this has created a fairly steady demand for whalecatchers, which has been met by the country's shipbuilding industry. The experience necessary for the successful construction of craft of this specialised type has thus been gradually accumulated.

One firm which has specialised in these vessels is the Hitachi Shipbuilding & Engineering Co., Ltd., of Osaka, which built its first whalecatcher in 1907, and since then has built a total of 34 ships of this type. In the earlier ships, steam reciprocating machinery was employed, but a notable development in recent vessels has been the use of diesel engines for propulsion purposes. Steam reciprocating machinery is commonly used in British and Norwegian whalecatchers, one reason for this being the necessity for frequent manœuvring at slow speeds, while making as little noise as possible. The Hitachi yard supplied its first diesel-engined whalecatcher ten years ago, however, and the fact that all succeeding whalecatchers built by the firm for Japanese owners have been diesel-engined shows that vessels so powered can be successfully operated.

Modern Japanese whalecatchers are on the whole smaller than their British or Norwegian counterparts. They are seldom more than about 400 tons gross, as against the 500 to 600 tons which is commoner here. Of the five standard types of whalecatcher offered by the Hitachi yard, however, one is of 630 tons gross, though the firm has not yet built a vessel to this design. These five types include three with steam reciprocating machinery, and two with diesels. The steam designs are of 630, 530 and 350 tons gross, with designed speeds of 15, 14.7 and 14.2 knots, and endurances of between 3,500 and 4,000 miles. The diesel-engined designs are of 400 and 170 tons gross, and have speeds of 15.5 and 12.5 knots. Their endurances, at 7,500 and 6,000 miles respectively, are considerably more than the steam-driven designs. It is noticeable, however, that they require a larger crew.

The ships actually built by the yard recently are variations of the different designs rather than exact copies of them. Since the war five catchers have been built for Japanese owners, and two for Norway. These two are the only steam-driven whalecatchers to be constructed at the yard since the war. They are of 530 tons gross each, and were ordered by Hvalfangerselskapet Kosmos II A/S.

The plans above are of *Konan Maru* No. 3, a diesel whalecatcher of 417 tons gross and 1,855 h.p. completed in 1949.

# ROUND THE SHIPYARDS

## Work in Progress in Scotland

**By THE SHIPPING WORLD'S Own Correspondent**

THERE has been a welcome influx of new business since the New Year, mainly for tankers. Port Glasgow has done extremely well in this connection and it is an encouraging feature that this town—long one of the less fortunately placed industrially—is now assured of work for a long period ahead. T. & J. Brocklebank, Ltd., have placed an order for a 9,000-tons turbine cargo liner with William Hamilton & Co., Ltd., following the order for a 16,500-tons tanker placed earlier in the month by Johan Gerrard, of Kristiansund, Norway. Ferguson Brothers (Port Glasgow), Ltd., are to build a 211-ft. twin-screw diesel-electric pilot launch for the Port Phillip Sea Pilots' Association, Melbourne. Lithgows, Ltd., booked an order for a 16,500-tons d.w. tanker for Wilh. Wilhelmsen, Oslo. Later in the month, the Anglo-Saxon Petroleum Co., Ltd., placed orders for two 18,000-tons deadweight tankers with Lithgows, Ltd., the turbine machinery going to David Rowan & Co., Ltd. These initial orders for 1951 show clearly that tankers are still the dominant type, and that work offered the Clyde this year will continue to emphasise this fact. The British Tanker Co., Ltd., is also expected to provide a major amount of new work for Clydeside.

Perhaps the most encouraging feature of the past month in Scotland has been the successful organisation of measures to defeat the electric power cuts. These threatened seriously to dislocate industry, and forced a resumption of the measures used during the previous power crisis. The vast majority of workers in the West of Scotland have cooperated and have made it possible to work the " short day " system. It would be idle to pretend that the present method of working is ideal; but what can be claimed is that it has largely eliminated the incidence of power cuts and has permitted full time working.

### Reduced Launching Activity

There has been little launching activity. Conditions have been very much against completion of work, but a number of launchings have been scheduled for February and should help to bring up the total. There has been similarly reduced activity in the shipbreaking yards and current expectations are that supplies from these sources will be limited in view of the desire to keep ships afloat and working. One feature of the current position is the difficulties of the smaller yards in relation to the larger. The trend towards large tankers has filled up most of the Scottish yards for perhaps two years ahead. But there is vastly less demand for smaller units than for large, and consequently less work ahead for the yards specialising in the former. Aberdeen builders have been placed in the unfortunate position—although still active—that their volume of forward work is considerably less than might be desired. At the end of the year John Lewis & Sons, Ltd., had nine vessels on hand, six of them trawlers. Other yards here, and throughout Scotland, are in a less fortunate position and may well need fresh work before the end of the year.

### New Engineering Developments

On the engineering side shipyards continue to show an interest in many related activities. Mr. Herbert Morrison, Lord President of the Council, was a guest at John Brown & Co., Ltd., Clydebank, on January 27, when he saw gas turbine experimental work, using peat as the fuel. This work continues to make progress, the ultimate hope being that peat can be taken from Scottish bogs and be used as fuel for on-the-spot turbine units feeding electricity to the grid. The Rolls-Royce organisation continues to expand, with factories now at Larkhall and Blantyre. These, with Hillington, will manufacture jet aero engines. It is difficult to see where the labour is to be found for these developments, although the two new factories are sufficiently far from the Clyde yards to avoid dislocation of labour.

Three Clyde yards have recently reminded us of their background and antiquity. William Denny & Bros., Ltd., of Dumbarton, have issued a pictorial review of their 106 years of shipbuilding, which recalls such famous names as the *Premier*, the *King Edward*, the *Cutty Sark* and Lipton's *Shamrocks*. Scotts' Shipbuilding & Engineering Co., Ltd., has been building ships at Greenock for 250 years and records this background in a revised issue of *Two Centuries of Shipbuilding*. Another firm to recall two centuries is Alex. Stephen & Sons, Ltd., which worked on the East Coast for about 100 years before coming west to the Clyde, where it has now completed a fine 100 years of building. These firms' histories emphasise the solid basis on which Clyde shipbuilding is founded and the trust and good relationship which is maintained today between those who build and those who buy Clyde-built ships.

## 50th Anniversary of Swedish Boat-Engine Builders

One of the pioneers in the field of boat-engine production in Sweden, the Albin Motor Works, of Kristinehamn, recently celebrated its 50th anniversary. Starting as a small workshop at the turn of the century, the company soon entered into the production of petrol and paraffin engines, based on two ingenious and reliable designs of Erik Larsson, the 16-year-old son of the founder and now head of the company. Production today comprises a wide range of engines, including small diesels, for marine and stationary use, from 4 to 200 h.p. A large and growing share of the production is being exported, exports in 1950 amounting to about 35 per cent of total production. Albin engines are used in fishing craft, passenger boats and motor yachts, as well as ashore, in dozens of countries. The company also specialises in motor-driven fire pumps, precision fine borers, etc.

## An Old-Established Firm

J. & E. Hall, Ltd., have a history dating back to 1785, when the business was founded by John Hall. In an excellently produced brochure, which the firm has produced to describe the conditions and prospects for engineering apprentices, they not only give details of their apprenticeship scheme and of their works as it is at present, but also include a very interesting history of the firm. The first John Hall was a millwright, and soon after he had set up a blacksmith's business at Dartford he extended it to include a foundry. In due course the business was taken over by his two sons, John and Edward, whose names it bears today. The last of the family to be connected with the firm was Edward, who died in 1875, and four years later it came under the control of the late Mr. Everard Hesketh. It was then in a far from flourishing state, handicapped by outdated and dilapidated premises and equipment, but he was successful in turning it again into a prosperous concern. In 1900 it became a limited company under its present title.

## Orders for Patent Hatch Covers

The increasing interest of the shipping industry in the values of patent hatch covers is shown in a recent list of orders completed during the past year and orders on hand by the M.E.P. Company, Ltd., Liverpool, manufacturers of patent interlocking flexible steel hatch covers. Vessels equipped with this company's hatches during the past year include four cargo liners owned by the Blue Star Line, the Cunard cargo liner *Assyria;* the *Exmoor* and *Dartmoor* for the Moor Line, Ltd., and the vessels *Kalidan*, *Kindat* and *Sherborne* owned by P. Henderson & Co., Ltd. It is understood that the Henderson Line is replacing its wooden covers with M.E.P. flexible steel slab hatch covers throughout the fleet. The Stag Line, Ltd., and Lamport & Holt Line, Ltd., are among the companies which have fitted similar hatch covers, while Ellerman Lines, Ltd., have had them fitted in the *City of Oxford*. Orders on hand for this year include two new vessels building for Clan Line Steamers, Ltd., two vessels which W. Doxford & Co., Ltd., is building for T. & J. Harrison, Ltd., and for a cargo liner now building for Elder Dempster Lines, Ltd.

# COAL AND OIL

## NEW COAL PRICES FOR COASTING TRADE

THE NEW inland coal prices announced by the Minister of Fuel and Power in the House of Commons last week will affect coal-burning ships in coastal trade, as well as fishing vessels. Owners of these vessels have had to face fewer increases in fuel costs than any others in recent years: as Mr. Noel-Baker said, the cost had risen by less than 3 per cent in the two years before the present increase. The fact remains, however, that they are probably less well equipped to meet any increases in operating costs than any other form of shipping, though it will be some consolation to coastal shipowners that the price increase will also affect the railways. In fact it will probably affect the latter even more. Trawler owners could also do without any further additions to their costs at present, though if an addition to the fuel bill had to come it might easily have picked a worse time than the present, when sales of fish are bound to reflect the shortage of meat. The increase amounts to 4s. 2d. a ton, which is 5 per cent of the present price. Export prices are apparently to be left untouched, though in view of the unavailability of the coal this fact is of little more than academic interest. In the first three weeks of this year coal exports to foreign countries, including the Channel Islands and bunker depots abroad, totalled only 292,000 tons, as compared with 927,000 tons in the corresponding period of 1950. At the same time, 162,500 tons of coal have been imported into this country since January 1. Actual exports to foreign countries totalled 276,000 tons in the first three weeks of this year, while 10,000 tons went to the Channel Islands and 7,000 tons to bunker depots abroad. In addition, 202,000 tons was shipped as foreign bunkers (including trawlers), making a grand total of 295,000 tons, as against a similar total of 1,172,000 tons in the same period last year. Even this rate is likely to be reduced unless the Government's measures to meet the situation encounter unexpected success.

### Oil Production in Borneo

Some details have recently been received regarding the encouraging rate of oil production in Seria, in Brunei, North Borneo, which has now reached a record rate of 100,000 barrels per day—that is, about 5,000,000 tons annually, or five times that of the best prewar days. Seria, already the most productive field in the British Commonwealth, has reached this peak despite the havoc of war damage; it was twice demolished—first in 1941, immediately before the Japanese invaders arrived, and secondly in 1945, when Australian re-occupation forces were approaching. Discovered by Shell in 1929 after years of painstaking exploration in the region, this oilfield was producing at the rate of over one million tons per annum by 1940; at that time nearly 150 wells had been drilled, some of them offshore. The Japanese attempts to work the area were none too successful, although they did renew production on a small scale. By the end of 1945 Shell technicians had started re-drilling, and in March, 1946, the first postwar cargo of crude oil was shipped for refining in Australia. On Christmas Day, 1946, Lutong Refinery, in Borneo itself and only some 30 miles by pipeline from Seria, came back into operation, and since that date progress has been rapid. The greater part of the new equipment on the oilfield has been obtained from sterling sources. Included in the restoration work was the construction of two new submarine oil loading lines, or "Sealines," each three miles long, used to load tankers which are prevented by shallow water from going closer inshore. A third line is due to come into operation this year. Geographically, Seria is of vital importance, being one of the principal production fields of the East Indies, the only region of the Far East producing crude oil in any quantity. Australia, New Zealand and Malaya, to name only three countries, rely to a large extent on the East Indies for their supplies of liquid fuels.

### Active Tanker Chartering Continues

THERE was tremendous activity in the tanker market during January. Davies & Newman, Ltd., report that charterers have been willing to fix for practically any period from a single voyage up to three years consecutive voyages. The very strong demand for tonnage during the month has once again hardened rates considerably, but by chartering tonnage on consecutive voyage basis some charterers have been able to cover at well below the peak rates paid for single voyages. Rates of freight for single voyage fixtures have varied somewhat during the month, particularly in relation to the prompt or forward position of the vessel at the time of fixing, but the tendency has been upward. One of the highest rates paid was USMC plus 200 per cent for an American dirty T2 from the Persian Gulf to U.K./Continent, which is equivalent to just over MOT plus 330 per cent. Latterly, a number of vessels have been fixed from Sidon to U.S.N.H. and from Persian Gulf to U.K./Continent at rates ranging between USMC plus 170 per cent to USMC plus 185 per cent. The highest sterling rate for a single voyage during the month appears to be that of a 10,000-tons dirty vessel from the Caribbean Sea to Denmark at MOT plus 230 per cent. With regard to clean tonnage, two large Scandinavian vessels were fixed from the Persian Gulf to the U.K./Continent at MOT plus 240 per cent, while handy size tonnage has latterly been fixed for transatlantic voyages at MOT plus 275 per cent. Sterling clean tonnage is now holding for rates in excess of MOT plus 300 per cent. The chief feature of the month, however, has been the fixing of tonnage on consecutive voyage basis by the London major companies. Tonnage has been fixed for 12 months consecutive voyages from the Persian Gulf to U.K./Continent at rates between MOT plus 135 per cent and MOT plus 150 per cent with commencement up to the end of the year.

## OFFICIAL NOTICES

### Change of Name

SAUNDERS ENGINEERING & SHIPYARD, LTD., Fryers, Beaumaris, Anglesey. Name changed to Saunders-Roe (Anglesey), Ltd., on January 10.

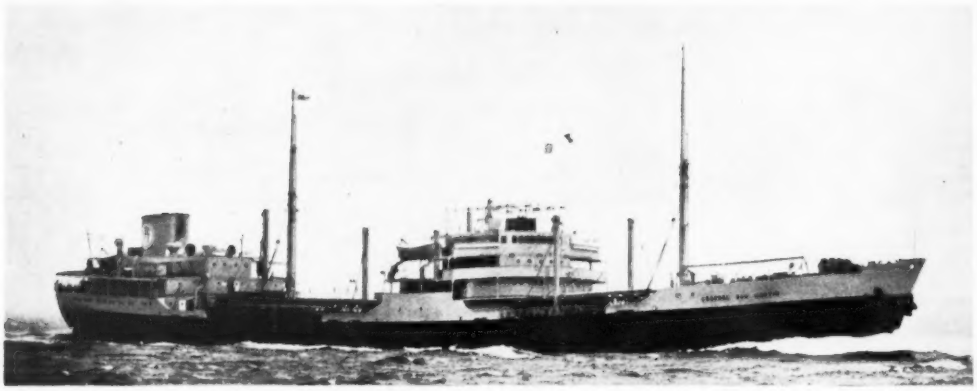
### Increases of Capital

EDGE & SONS, LTD., engineers, ironfounders, chainmakers, etc., Coalport Works, Shifnal, Salop. Increased by £70,000, in £1 shares, beyond the registered capital of £30,000. At June 30, 1950, British Ropes, Ltd., held 19,680 shares out of 19,980 issued.

CHARENTE STEAM-SHIP CO., LTD., Mersey Chambers, Liverpool, 2. Increased by £2,048,000, in £1 ordinary shares, beyond the registered capital of £512,000. Each of the £1,000 shares in the original capital has been sub-divided into 1,000 shares of £1 each.

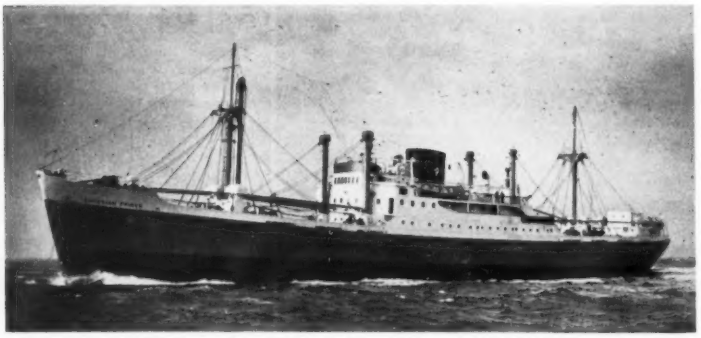
J. B. SHIPPING CO., LTD., 9-11 Copthall Avenue, London, E.C.2. Increased by £15,000, in £1 ordinary shares, beyond the registered capital of £25,000. At December 13, 1950, the shareholders included Erimus Shipping Co., Ltd., Judd Budd, Ltd., and King Coal, Ltd.

PETROLEUM MARKETING CO. (WEST INDIES), LTD., 22 Great St. Helen's, London, E.C.3. Increased by £230,000, in 115,000 "A" and 115,000 "B" shares of £1 each, beyond the registered capital of £20,000. At December 14, 1950, Trinidad Leaseholds, Ltd., held 124,990 "A" shares and the Shell Petroleum Co., Ltd., held 124,980, "B" shares out of 125,000 of each class issued.



**Mersey-Built Tanker for the Argentine**

The single-screw turbine driven tanker *General San Martin* has been completed by Cammell Laird & Co., Ltd., for Yacimientos Petroliferos Fiscales, of Buenos Aires. She is a vessel of some 12,000 tons gross with a deadweight of about 18,000 tons on a summer draught of 31 ft. Her principal dimensions are 565 ft. 9 in. length o.a., 530 ft. b.p., 71 ft. breadth moulded and 39 ft. depth moulded. Designed with a raked stem and cruiser stern, the hull is divided by one longitudinal bulkhead and 16 transverse bulkheads. Supplied by the shipbuilders, the propelling machinery comprises a set of 2-cylinder turbines connected to a single shaft through double-reduction gearing, developing about 6,000 s.h.p.



**Cargo Liner "Egyptian Prince"**

Built by the Burntisland Shipbuilding Co., Ltd., the single-screw motor cargo liner *Egyptian Prince* has been delivered to her owners, the Prince Line, Ltd. (Furness, Withy & Co., Ltd.). Designed for the carriage of citrus fruits and general cargo, she has a gross tonnage of 3,364 and carries a deadweight of 4,625 tons on a draught of 21 ft. 7½ in. She has a length o.a. of 363 ft. b.p. 349 ft., breadth of 51 ft. 3 in. and a depth moulded of 30 ft. 9 in. The cargo hatches are well served for the rapid handling of cargo, two of the derricks having a capacity of 10 tons and one of 25 tons. Fitted amidships, the main engine has been supplied by R. & W. Hawthorn, Leslie & Co., Ltd., and comprises a Doxford-type diesel with four cylinders developing 3,300 b.h.p.

**Single-Screw Cargo Steamer "Seawall"**

Of about 5,850 tons gross, the single-screw cargo steamer *Seawall* has been built for the Matapan Shipping Co., Ltd., by William Gray & Co., Ltd. She is of the shelterdeck type with a deadweight of about 10,000 tons on a draught of 26 ft. 4 in. The principal dimensions are 457 ft. 6 in. length o.a., 57 ft. 8½ in. breadth extreme and 38 ft. 3 in. depth to shelter deck. There are five cargo holds and five hatchways, each hatch being served by two 5-ton derricks. A derrick of 30 tons lifting capacity is fitted at No. 2 hatchway. The propelling machinery of the *Seawall* has been built by the Central Marine Engine Works of the shipbuilders and consists of a triple-expansion steam engine with three oil-fired boilers. A speed of over 12 knots was attained on trials

# NEW CONTRACTS

**Yards in Great Britain and Northern Ireland**

| Shipowners | No. of Ships | Type | Approximate Tonnage: Gross | Approximate Tonnage: Deadweight | Dimensions (ft.) | Speed (knots) | Propelling Machinery | Total h.p. | Engine Builders | Shipbuilders |
|---|---|---|---|---|---|---|---|---|---|---|
| Walmar S.S. Co. | 1 | Cargo | — | 9,600 | 430 b.p. × 57.5 × 37.16 | — | Recip. steam, Bauer-Wach turb. | — | Shipbuilders | John Readhead |
| Hudson S.S. Co.* | 1 | Cargo | — | 8,000 | — | — | Diesel | — | N.E. Marine | John Readhead |
| Watts, Watts & Co. | 1 | Cargo | — | 10,350 | — | — | Diesel | — | Alex. Stephen & Sons | Caledon S.B. |
| Anglo-Saxon | 1 | Tanker | — | 18,000 | — | 14 | Turbo-electric | — | British Thomson-Houston | Swan, Hunter & Wigham Richardson, Wallsend |
| Anglo-Saxon | 2 | Tankers | — | 18,000 (each) | — | 14 | Steam turbine | — | D. Rowan & Co. | Lithgows |
| Kassos S.N. Co., Syra, Greece | 2 | Cargo | — | 10,000 (each) | — | 14 | Sin.-scr., 4-cyl. diesel | — | Shipbuilders | Wm. Doxford |
| Port Phillip Sea Pilots' Assoc., Melbourne | 1 | Pilot vessel | — | — | 211 (long) | — | Tw.-scr. diesel-electric | — | English Electric Co. | Ferguson Bros. (Port Glasgow) |
| Brazilian Govt. | 1 | Cutter suction dredger | — | — | 119 × 26 × 8 | — | Non-propelled | — | — | Fleming & Ferguson |
| Union S.S. Co. of N.Z. | 1 | — | — | — | — | — | Diesel | — | — | Henry Robb |
| **Commonwealth and Foreign Yards** | | | | | | | | | | |
| — | 2 | Coasters | 500 (each) | — | 177.2 × 30.2 | — | Diesel | — | — | Abeking & Rasmussen, Lemwerder |
| — | 2 | Coasters | 300 (each) | — | — | — | Diesel | — | — | Elsflether Werft |
| — | 2 | Cargo | 500 (each) | — | 187.7 × 32 | — | Diesel | — | — | Werft C. Renck, Jnr., Harburg |
| Dansk Petrol A/S, Copenhagen | 1 | Tanker | 200 | — | — | — | Diesel | — | — | Brodrene Krogers Skibs., Husum |
| — | 2 | Coasters | 300 (each) | — | — | — | Diesel | — | — | Stader Werft |
| Swedish owners | 1 | Ferry | — | — | — | 18 | — | — | — | August Pahl, Finkenwerder, Hamburg |
| Johannes Thode, Hamburg | 1 | Cargo | 1,000 | 1,800 | — | — | Diesel | — | — | August Pahl |
| Schulte & Bruns, Emden | 2 | Cargo | 700 (each) | 1,200 (each) | — | — | Diesel | — | — | Schulte & Bruns |
| Halfdan Ditlev-Simonsen & Co., Oslo | 1 | Tanker | — | 14,750 | — | — | — | — | — | Akers M.V., Oslo |
| A/S Thor Dahl, Sandefjord | 1 | Cargo liner | — | 7,750 | — | — | — | — | — | Bergens M.V. |
| Pulp Rederi A/B, Stockholm | 1 | Tanker | 11,500 | 16,500 | 493.3 × 67.3 × 37.4 | — | M.A.N. diesel | 6,500 | Shipbuilders | Bremer Vulkan Schiffbau und Masch., Vegesack |
| Ernst Komrowski, Hamburg | 1 | Cargo | 4,160 | 7,000 | 398.3 b.p. × 56.4 × 23.1 | — | M.A.N. diesel | 2,800 | — | Deutsche Werft, Hamburg |
| Bergen owners | 1 | Refrig. cargo | — | 1,000 | 179.2 b.p. × 31.5 × 20.8 | — | Nohab diesel | 850 | — | Haugesunds M.V. |

* Additional particulars of a contract which had previously been reported in THE SHIPPING WORLD as being placed by unknown owners.

# LAUNCHES

**Yards in Great Britain and Northern Ireland**

| Date | Shipowners | Ship's Name and/or Yard No. | Type | Approximate Tonnage: Gross | Approximate Tonnage: Deadweight | Dimensions (ft.) | Speed (knots) | Propelling Machinery | Total h.p. | Engine Builders | Shipbuilders |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Jan. 24 | Drake Shipping Co. | *Merchant Duke* (1241) | Cargo | 5,900 | 9,950 | — | 11 | Steam | — | Shipbuilders | Wm. Gray |
| Jan. 25 | Boyd Line | *Arctic Warrior* (1367) | Trawler | 700 | — | 178 b.p. × 31 × 16.25 | — | Tr.-exp. steam | 1,200 | Amos & Smith | Cochrane & Sons |
| Jan. 25 | Icelandic Govt. | *Kolbeinn Ungi* (228) | Trawler | 717 | — | 205 o.a. × 30 × 16 | — | Recip. steam | — | Shipbuilders | John Lewis & Sons |
| Jan. 25 | Admiralty | *St. Martin, W.B.* (755) | Grab hopper dredger | 450 | — | — | — | — | — | — | Fleming & Ferguson |
| Jan. 26 | Icelandic Govt. | *Stigandi* (736) | Trawler | 685 | — | — | — | Tr.-exp. steam | — | — | Alex. Hall |

# TRIAL TRIPS

**Yards in Great Britain and Northern Ireland**

| Date | Shipowners | Ship's Name and/or Yard No. | Type | Approximate Tonnage: Gross | Approximate Tonnage: Deadweight | Dimensions (ft.) | Speed (knots) | Propelling Machinery | Total h.p. | Engine Builders | Shipbuilders |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Jan. 30 | British Tanker Co. | *British Navigator* (664) | Tanker | 6,100 | 8,400 | 423 o.a. × 56 × 30.08 | 11 | Sin.-scr., 3-cyl. diesel | — | Wm. Doxford | Jos. L. Thompson |
| 1950 | | | | | | **Commonwealth and Foreign Yards** | | | | | |
| Dec. 22 | Dansk-Franske Damps., Copenhagen | *Irland* | Tanker | 10,000 | 14,200 | 522 × 67 × 34.15 | 13.5 | Tw.-scr., 8-cyl. diesel | 10,200 | Masch. Augsburg-Nurnberg | Deutsche Werft, Hamburg |
| 1951 | | | | | | | | | | | |
| — | Oldenburg-Portugiesische Dampfs.-Rhederei | *Tanger* (619) | Cargo | 1,928 | 3,300 | 301 × 48 × 14 (draught) | 12 | Sin.-scr., 2-str. M.A.N. diesel | 2,000 | — | Deutsche Werft, |
| Jan. 13 | A. P. Moller, Copenhagen | *Charlotte Maersk* (112) | Tanker | 9,020 | 14,000 | 450 b.p. × 63 × 36.6 | 13.75 | Sin.-scr., 5-cyl., 2-str., diesel | 5,750 | Burmeister & Wain, Copenhagen | Odense Skibs. |
| Jan. 19 | Kon. Rotterdamsche Lloyd, Rotterdam | *Ampenan* | Cargo & pass. | 9,500 | 12,200 | 490 × 66.5 × 38.5 | — | Sin.-scr., dble.-red. geared turbine | 8,500 | General Electric Co., U.S.A. | Rotterdamsche Droogdok Maats., Rotterdam |
| Jan. 19 | Skibs A/S Nordheim, Oslo | *Ventura* | Cargo liner | 5,713 | 9,225 | 430 b.p. × 61.48 × 29.25 | 16 | Sin.-scr., 6-cyl., 2-str. M.A.N. diesel | 6,000 | Shipbuilders | Kockums M.V., Malmo |

# MARITIME NEWS IN BRIEF

**From Correspondents at Home and Overseas**

A SHARP increase in imports, particularly from Britain, and a big drop in exports were the main features of trade in the port of Montreal during 1950. The port handled 4,797 merchant vessels totalling 8,264,000 tons, against 4,480 ships of 7,637,311 tons in 1949. Inward cargo from abroad rose from 4,263,258 tons in 1949 to some 6,197,000 tons in 1950, an increase of about 45 per cent. Cargo leaving Montreal for foreign ports dropped from 4,168,136 to 3,416,000 tons. Since the war petroleum oils have been the main import cargo handled at Montreal. The 3,150,000 tons handled last year made up about 54 per cent of total foreign and domestic imports.

IN 1950, Middlesbrough docks handled 730 vessels of 1,666,654 tons net, and dealt with 758,356 tons of cargo. Imports were 160,178 tons compared with 164,234 tons in 1949, while exports were 473,671 tons against 331,895 tons. Exports of iron and steel rose from 167,753 tons to 293,737 tons, while coal and coke shipments fell from 139,657 tons to 124,507 tons.

MR. F. HARTAS, assistant manager of the shipping department of the Eagle Oil & Shipping Co., Ltd., has retired and has been succeeded by Mr. Stanley G. Read. Mr. Read joined the Anglo-Mexican Petroleum Co., Ltd., in 1924, and since 1934 has been engaged on the chartering side.

THE BOARD of Powell Duffryn, Ltd., have announced the appointment of Sir Henry Wilson Smith, Mr. Alfred Read, Mr. Miles Belfrage Reid and Mr. Thomas Stuart Overy as additional directors. Mr. Alfred Read will remain secretary.

THE DEATH has occurred of Mr. C. W. Cairns. He retired in 1949 from the staff of Cairns, Noble & Co., Ltd., which he had joined in 1903 as superintendent engineer. He was a pioneer in the use of geared turbines in merchant ships.

• • • •

THE ORIENT LINE is running five cruises this year, four more than was possible last year. The first cruise will be made to Scandinavian waters by the *Orion*. It will last for 13 days, and first-class fares will range from £61 to £96, with tourist class fares from £35 to £50. The remaining four cruises will be made to the Mediterranean, by the *Orcades*. They range in length from 13 to 19 days, with first-class and tourist-class fares at similar levels proportionally to those of the first cruise.

CAPT. J. B. MACARTHY has been appointed commodore of the Eagle Oil & Shipping Co., Ltd., in succession to Capt. A. H. Hicks. Capt. Macarthy is the first Eagle Oil apprentice to become commodore of the fleet. From 1939 to 1947, except for one voyage, he was master of the *San Felix*. His present command is the *San Salvador*.

CAPT. R. G. THELWELL, master of the Cunard liner *Britannic*, has been promoted to the rank of Commodore, 2nd class, R.N.R. He served with the Royal Navy throughout the last war, and was at one time Captain of the Eastern Fleet Escort Force.

THE LINER *Aorangi*, the only passenger vessel operating between Australia and North America, has arrived in Sydney on her last run in the Pacific service. She is to be laid up in Sydney, and it is believed that she will be offered for sale within the British Commonwealth.

IT IS announced by the North Atlantic United Kingdom Freight Conference that, beginning on April 1, there will be a 15 per cent increase on shipments from U.S. ports to the United Kingdom.

THE DEATH has occurred of Vice-Admiral C. V. Usborne, a former Director of Naval Intelligence and an underwriting member of Lloyd's. In 1915 he invented apparatus which led to the introduction of paravane mine protection.

THE Mercantile Dry Dock Co., Ltd., Jarrow, have received contracts for converting from coal to oil burning the steamers *Prince Albert Park*, *Commodore Grant* and *Fort la Tour*. The *Fort Eyrie* is undergoing similar work.

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NINE CRUISES will be made this summer by ships of the P. & O. Line, four by the *Himalaya* (28,000 tons) and five by the *Chusan* (24,000 tons). Both ships will carry first-class passengers at rates starting from £5 per day, and tourist-class at from £3 per day. The cruises range in length from 13 to 21 days, most of them being of 13 or 14 days' duration. The *Chusan* is to make one cruise to Scandinavian waters: all the others will be to the Mediterranean.

THE Middle Docks & Engineering Co., Ltd., South Shields, has received an important contract for extensive bottom damage repairs to the Israeli ship *Nakhshon*. The ship went aground at Tel Aviv some months ago. Temporary repairs are being carried out in Italy before she is brought to Britain.

AT THE beginning of the year the German trawler fleet consisted of 231 vessels of 93,100 tons gross. During 1950, 51 new trawlers joined the fleet, and 44 were sold or broken up. In 1939 there were 373 trawlers of 123,332 tons gross owned in Germany.

SHIPS built in German yards for German owners in 1950 were 115 in number, with a total of 100,800 tons gross. Of these 49 were foreign-going vessels (81,900 tons) and 66 were coasters (18,900 tons).

PLANS for extending Nos. 1 and 2 Dry Docks of the Middle Docks & Engineering Co., Ltd., have been approved by South Shields Town Improvement and Streets Committee. They are at present 315 ft. and 406 ft. long respectively.

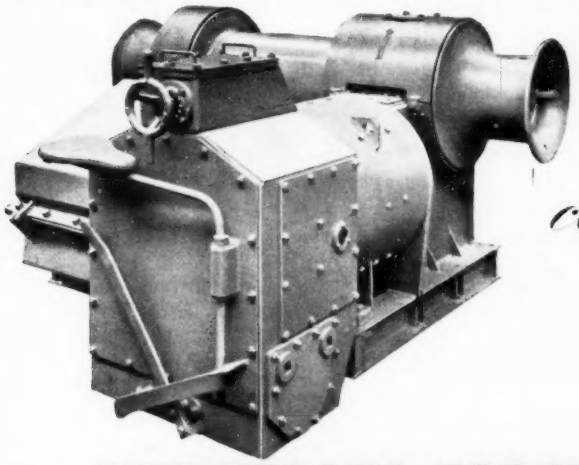
WORK will be commenced later this year by Vickers-Armstrongs, Ltd., Walker-on-Tyne, on a pair of dock gates for the enlarged dock being built at Sunderland for T. W. Greenwell & Co., Ltd.

WHEN she next returns to Liverpool, towards the end of February, the Cunard liner *Scythia* will undergo her annual overhaul before resuming service on March 14.

MR. L. H. J. PHILLIPS, manager, radio sales department, Metropolitan-Vickers Electrical Co., Ltd., is the newly elected chairman of the Radio Communications and Electronics Engineering Association. Mr. Phillips left the Metrovick research department in 1941 to become head of the Radio Department of the Royal Aircraft Establishment at Farnborough. From 1942 to 1945, when he returned to the company to occupy his present position, he was Deputy Director of Communications Development in the Ministry of Aircraft Production

MR. A. W. THEOBALD has been re-elected chairman of the Institute of London Underwriters for 1951. Mr. Theobald was previously chairman of the Institute in 1950 and was deputy chairman for the years 1948 and 1949. He is the underwriter of the Ocean Marine Insurance Co., Ltd., and is also marine underwriter of The Royal Exchange Assurance and The Sun Insurance Office, Ltd.

# ELECTRIC WINCHES



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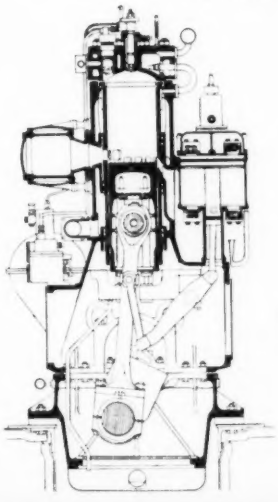

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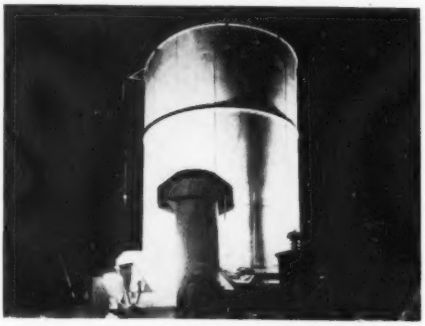

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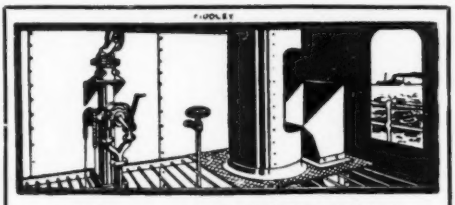

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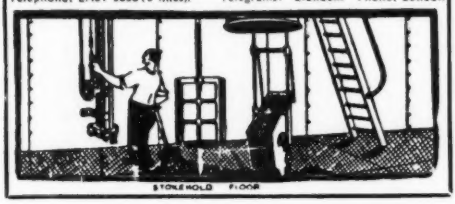

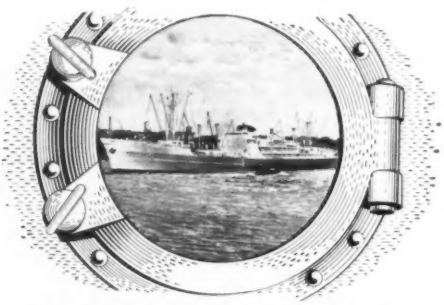

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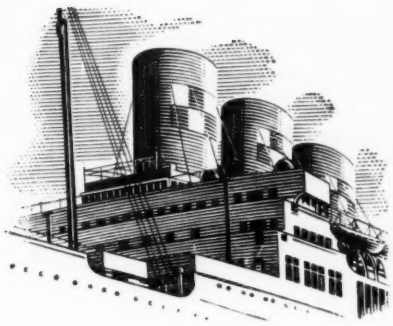

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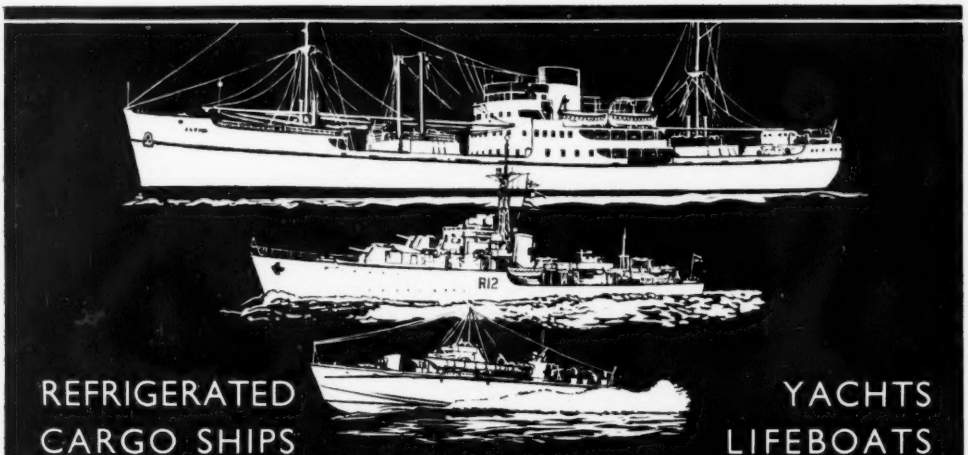


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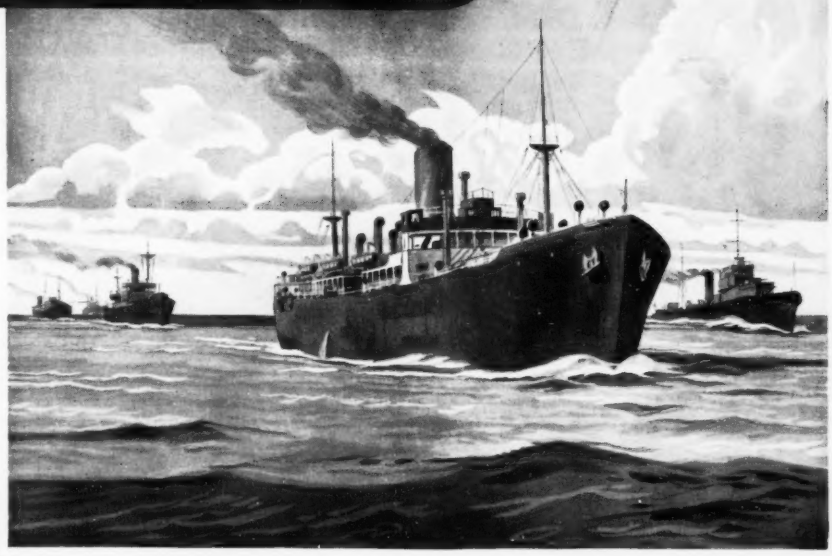

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